# UNITED STATES DEPARTMENT OF THE INTERIOR

# WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1940

PART 4. SOUTH-CENTRAL STATES

Prepared in cooperation with the States of ARKANSAS, LOUISIANA, OKLAHOMA, and TEXAS and other agencies

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 909

# UNITED STATES DEPARTMENT OF THE INTERIOR Harold L. Ickes, Secretary

GEOLOGICAL SURVEY W. C. Mendenhall, Director

Water-Supply Paper 909

# WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1940

PART 4. SOUTH-CENTRAL STATES

BY

O. E. MEINZER, L. K. WENZEL and others

Prepared in cooperation with the States of ARKANSAS, LOUISIANA, OKLAHOMA, AND TEXAS and other agencies



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1941

# CONTENTS

	Page
Introduction, by 0. E. Meinzer and L. K. Wenzel	. 1
R. G. Kazmann.  Louisiana, by J. C. Maher and T. B. Stanley, Jr	22 49 76

# ILLUSTRATIONS

1.	the country covered by the six water-supply papers on water levels and artesian pressure in observation	3
2.		23
3.		
	Louisiana	26
4.	Map showing location of observation wells in Oklahoma	51
	Counties Oklahoma	54
6.		
		78
7.		
		81
	2. 3. 4. 5.	the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1940

#### INTRODUCTION

# By O. E. Meinzer and L. K. Wenzel

The rock formations of the earth are great natural underground reservoirs in which a part of the water derived from rain and snow is stored to supply wells and springs and to maintain the flow of streams during periods of fair weather. Water levels in wells register the stages of these natural reservoirs; they show the extent to which water supplies are depleted by drought or by heavy pumping for public waterworks, for irrigation, or for industrial uses and the extent to which they are replenished in seasons of abundant rainfall or melting snow. The changes in pressure recorded on flowing wells may indicate depletion or replenishment of the artesian reservoirs.

The regular publication of records of water levels and artesian pressure in the United States was begun by the Geological Survey in 1935, and from that year through 1939 one volume containing these data was published each year. The volumes were issued as Water-Supply Papers 777, 817, 840, 845, and 886. This series of reports is in a sense an inventory, year by year, of the ground-water supplies of those parts of the country that it covers. The number of observation wells and the quantity of records on water levels and artesian pressure obtained from them have increased gradually from year to year. As a result it has been deemed advisable to publish the records for 1940 in six volumes, each volume containing records for one of the sections into which the United States has been divided. (See fig. 1.) The present volume covers the southcentral section and gives records of water level or artesian pressure in about 1,675 observation wells in Arkansas, Louisiana, Oklahoma, and Texas that were obtained by the Geological Survey and cooperating agencies. About 39 of these wells are equipped with automatic water-stage recorders. For some wells for which records had not heretofore been published complete records of water levels are given in this report, including those for years before 1940. For wells whose previous records have been published, however, this volume gives only current records. If complete

descriptions of the wells were given in one of the previous reports, only the well numbers or the well numbers and brief identifying descriptions are given in this report. The report includes about 10,350 individual measurements of water level or artesian pressure.

The water levels in this report are given with reference to datum planes of different kinds. Some are given in depth below the measuring point--that is, below the recognized reference mark, at or near the top of the well, from which the depth to water level is usually measured; and some are given in height above an assumed datum plane. As the measuring points on some of the wells were changed in 1940, the records may not be directly comparable with those in previous annual volumes, but changes in measuring points are recorded in this report. Water levels given in height above sea level or above assumed datum planes are generally comparable with those given in the previous volumes. Unless otherwise stated, the depth of wells is usually the measured depth below the measuring point.

Acknowledgments for effective services in the preparation of this report are due Mrs. Charlotte P. Berger and Misses Dorothy M. Ireland and Ermelinda F. Mattera, who typed the offset copy; and to Rodney Hart, who prepared many of the illustrations and gave other assistance in preparing the copy.

GENERAL SUMMARY OF CHANGES IN GROUND-WATER LEVEL IN 1940

IN THE SOUTH-CENTRAL PART OF THE UNITED STATES

The precipitation in Louisiana, Oklahoma, and Texas was above normal in 1940, but in Arkansas it was slightly below normal. Not all of the wells, however, had changes in water level that correspond to these moisture conditions. The fluctuations of water level and artesian pressure in observation wells depend upon many complex factors, such as the distribution and amount of precipitation, location of outcrop areas of the water-bearing formations, permeability and specific yield of the water-bearing materials, depth of the water table below the land surface, and proximity of the observation wells to areas of heavy withdrawals. Consequently, it is usually not possible to find a simple relation between the changes in water level or artesian pressure and the departures from normal precipitation. The fluctuations that occur in each observation well or group of similar wells must be studied separately in order

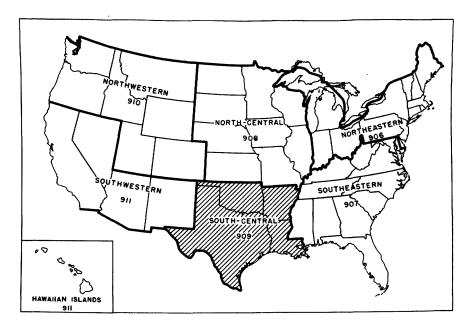


Figure 1.--Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1940. The shaded section represents the part of the country covered by this volume.

to evaluate the effects of the many factors influencing them. It is not ordinarily possible to make general statements regarding changes in ground-water levels that will apply over large areas. The following summaries are taken chiefly from the interpretive texts of the several State sections in this volume. They note very briefly the changes in ground-water levels or artesian pressure that occurred in 1940 in the parts of the underground reservoirs in the south-central States that the observation wells tap.

Arkansas. -- There was a net decline in water level from the spring of 1939 to the spring of 1940 throughout most of the Grand Prairie region, but the decline ranged from only about 0.1 foot to 9 feet. The average net change in water level for the entire region was a decline of about 0.5 foot. This is slightly less than the decline that occurred from the spring of 1938 to the spring of 1939.

Nearly everywhere along the eastern and southern borders of the Grand Prairie region, and in small areas along the western border there was a decline in water level of one foot or more. In the interior part of the region, however, the decline was in no place as much as one foot. In a small area several miles north of Carlisle, and in a small area between Stuttgart and Ulm, the ground-water level rose one to two-tenths of a foot from the spring of 1939 to the spring of 1940. In general, the differences in the change of water level from place to place can be attributed to differences in quantity of water pumped from wells for irrigation in different parts of the region.

Louisiana. -- The ground-water level in Grant, La Salle, and Avoyelles Parishes, in central Louisiana, fluctuated through a range during 1940 that was comparable to that of 1939. The water levels in wells in or near Alexandria, in Rapides Parish, were, however, in general lower in 1940 than in 1939.

In Tangipahoa and St. Tammany Parishes, in southeastern Louisiana, water levels in wells in 1940 were 1 to 2.5 feet lower than in 1939. The decline apparently was caused by increased draft from wells for irrigation and by a prolonged period of dry weather.

Ample precipitation during the growing season of 1940 provided more water than usual for the rice fields in southwestern Louisiana. As a result the pumpage from wells was reduced and the lowest water levels recorded for the year were on the average about 9 feet above the lowest levels of 1939. At the end of 1940, the water levels were still approximately 3.5 feet above the levels at the end of 1939.

Oklahoma. --Water levels in wells in the Panhandle-Beaver, Cimarron, and Texas Counties -- continued the gradual rise in 1940 that has been in progress since 1938. The average water level at the end of November 1940 was 0.05 foot higher than in November 1939 and 0.10 foot higher than in November 1938. The rise has been most pronounced in Beaver County where the November averages for 1939 and 1940 were 0.16 foot and 0.30 foot, respectively, above the average for November 1938. In all three of the Panhandle Counties, the maximum fluctuations of water level for groups of wells have occurred in wells tapping water in the alluvium.

Texas. -- Water levels in wells tapping water in the Edwards limestone in Uvalde and Medina Counties were mostly lower at the end of 1940 than at the end of 1939.

In Dimmit and Zavala Counties the water levels in most wells rose in 1940 to stages that were as high or higher than those observed in 1930. Large scale pumping for irrigation in parts of these counties has been in progress for the last 21 years.

Water levels in wells in the Houston area declined rather persistently in 1940, probably owing to increased pumpage. Ground-water levels in the vicinity of Galveston also declined in the year.

Measurements made in approximately 600 observation wells in the High Plains indicate that in areas of heavy pumping for irrigation the net decline in water level during 1940 was greater than it was during 1939. In areas beyong the influence of heavy withdrawals, the fluctuations in ground-water level were small.

The water levels in most wells in the vicinity of El Paso declined in 1940, chiefly because there was a considerable increase in pumpage during the year. The average decline in water level in 32 wells was 2.5 feet.

#### ARKANSAS

#### GRAND PRAIRIE REGION

# By D. G. Thompson and R. G. Kazmann

Measurements of depth to water level in wells in the Grand Prairie region, which comprises Arkansas County, large parts of Lonoke and Prairie Counties, and very small parts of Jefferson and Monroe Counties, Arkansas, were continued in 1940 by cooperative agreement between the Arkansas Agricultural Experiment Station and the Federal Geological Survey. This is the fourteenth successive year that measurements have been made in this region, the first measurements having been made by the Federal Geological Survey, in cooperation with the Arkansas Geological Survey, in September 1927. The work of measuring the wells was done by employees of the Agricultural Experiment Station under the general supervision of Prof. Deane G. Carter and under the immediate direction of Kyle Engler and L. C. Carter. As in past years, T. J. Fricke, engineer of the Federal Land Bank of St. Louis, has cooperated informally in the wellmeasurement program and in the study and interpretation of the field records.

Water-Supply Paper 777 contains records of 18 wells from the beginning of measurements, in 1927 or 1928, through 1935; Water-Supply Paper 840 contains the complete records of 16 additional wells; Water-Supply Paper 845 contains the complete records of 5 additional wells; and Water-Supply Paper 886 contains the complete records of 11 additional wells; the present report contains the measurements of these wells made during 1940, with the complete record from the beginning of observations through 1940, of 31 additional wells--a total of 81 wells.

As stated in the earlier reports just mentioned, the trend of water level or artesian head in the Grand Prairie region from year to year may be determined by annual measurements made once a year as late as possible in the spring but before pumping for rice irrigation begins. Accordingly, for most of the wells in most years only a single measurement, in the spring, has been made. Measurements made in the fall, after the irrigation season has ended, give some suggestion as to the effects of pumping during the previous summer; but, because local irregularities due to pumping during

ARKANSAS 7

the summer have not been smoothed out, they are not so conclusive as the measurements made during the following spring. For well 280, which is equipped with an automatic water-stage recorder, measurements are given of the depth to water level whenever the recorder charts were changed, which was generally at weekly intervals. A continuous record of the fluctuations of water level in this well has been obtained since August 1928. In the fall of 1940 several wells were measured several times, and these frequent measurements give some indication of the rate of recovery of the water level in wells after the close of the irrigation season.

As described in previous reports, the water level in all wells in the Grand Prairie region fluctuates -- at times as much as 0.8 foot in 24 hours and more than 1 foot in a few days -- as a result of changes in atmospheric pressure. To make accurate comparisons of the water level on corresponding dates in different years, corrections for fluctuations of atmospheric pressure must be made by comparing the pressures, as determined from barograph records at some place nearby, at the time of measurement in successive years. Messrs. Engler and Fricke have made such corrections for about 350 wells that were measured by them in the spring of 1939 and 1940, and on the basis of the corrected data have prepared a map of the Grand Prairie region showing lines of equal change in water level between the measurements. The map shows that a net decline in water level took place throughout most of the region, and the amount of change in level ranged from only about 0.1 foot to 9 feet. The average change in level for the entire region was about 0.5 foot. This is slightly less than the change from the spring of 1938 to the spring of 1939. It is believed to be due, at least in part, to the fact that the area irrigated by water from the Pleistocene beds was almost 15,000 acres less in 1939 than in 1938; and the quantity of water taken from the beds was about 28,000 acre feet less.

In general, the differences in decline from place to place can be attributed in large part to differences in quantity of water pumped for irrigation in different parts of the region; except that the greatest differences, which occurred in the extreme southeastern part of the region, probably are due to differences in the stage of White River on the dates of measurement of the wells in 1939 and 1940. Nearly everywhere along the eastern and southern borders of the region, and in small areas

along the western border there was a decline of one foot or more. In the interior part of the region, however, the decline apparently was generally not as great as it was from the spring of 1938 to the spring of 1939. In no place in the interior was it as much as one foot. Declines of eight or nine tenths of a foot occurred in a small area near Olena, another small area southwest of DeWitt, and a narrow, elongated area extending from a locality about five miles east of Stuttgart northeastward for several miles. None of these areas coincide with areas of considerable decline in the previous year. The water level in observation wells, corrected for barometric differences in the two years, apparently was one to two-tenths of a foot higher in the spring of 1940 in a small area several miles northeast of Carlisle, and in a small area between Stuttgart and Ulm. In the last year or two a considerable acreage in the vicinity of the latter area has been irrigated from surface reservoirs, and the rise in water level, though small, may reflect a decrease in pumpage of ground water.

It is believed that originally, in practically the whole region, the so-called shallow or Pleistocene water-bearing beds were completely saturated and the water was under artesian pressure. In a preliminary report on the Grand Prairie region, made public in 1931, it was stated that by the spring of 1929 the water level had declined so much that the upper part of the water-bearing beds had been drained in several areas that totaled about 100 square miles, or about 64,000 acres. It was estimated that at least 220,000, and perhaps more than 333,000, acre-feet of water had been removed from storage. On the basis of well logs and other data, Mr. Engler determined that by the spring of 1939 the area in which the upper part of water-bearing beds had been drained had enlarged to include a very large part of prairie, except only areas near the border of the Grand Prairie. The total area in which drainage is believed to have occurred by 1939 was about 319,000 acres, and by the spring of 1940, it is estimated to have been about 330,000 acres.

On the basis of the computed decline of water level throughout the region, and assuming an average figure for the specific yield, Mr. Engler estimated the quantity of water withdrawn from storage in the region. When this is deducted from estimated total pumpage, the resulting figure is the

<sup>1/</sup> Ground-water supplies for rice irrigation in the Grand Prairie region, Arkansas: U. S. Dept. Interior Press memo. 49844, 21 pp., 2 maps, Jan. 26, 1931.

quantity believed to have moved underground to the wells from areas of recharge, which, as stated in the 1931 report, are all believed to be outside the Grand Prairie region. The quantity of recharge by inflow determined on the basis of the decline in water level in 1939-1940 was estimated to be about 140,000 acre-feet. This is less than the preliminary estimate of safe yield of the water-bearing beds which, in the 1931 report, was given as between 150,000 acre-feet and 175,000 acre-feet of water annually. Similar computations based on the decline from the spring of 1939 to the spring of 1940 gave a figure for inflow very nearly equal to that for the previous period.

In order to check this estimate by another method in the winter of 1938-1939 Mr. Engler made several pumping tests to determine the coefficient of permeability of the water-bearing beds. Additional tests were made in the winter of 1939-40 and 1940-41; and further tests will be made in the winter of 1941-42. L. K. Wenzel, of the Geological Survey participated in the tests of 1939-40, and R. G. Kazmann in those of 1940-41. Computations of inflow based on the coefficients of permeability give results closely comparable to those determined by the drained area method. They all suggest that the safe yield of the Pleistocene water-bearing beds may be sufficient to irrigate only between 60,000 and 70,000 acres of rice instead of between 100,000 and 117,000 acres of rice originally estimated in the report of 1931. This is based on the assumption that the average requirement for rice is 1.8 acre-feet of water.

As pointed out in Water-Supply Paper 845, a study of water-level measurements obtained in the fall of 1938 shows that the water is moving toward the Grand Prairie region from rather distant localities to the west, northwest, and north of the region. Furthermore, in the rice-growing territory north of the Grand Prairie region the water level has declined somewhat as a result of pumping. If there should be a considerable increase in the acreage irrigated in this northern territory, with a consequent increase in consumption of ground water, the inflow from this direction into the Grand Prairie region would probably decrease, and the ultimate safe yield would be even less than the estimate given above. The consumption of ground water from the Pleistocene beds must be reduced greatly if the slow but continual decline in water level is to be stopped.

Water levels in the following wells are given in feet below the measuring points either described in the present report, or, for wells the records of which have been previously published, as described in Water-Supply Papers 777, 817, 840, 845, and 886.

Unless otherwise stated the measuring points for the following wells are either as given in the original published description or in the last amended statement published in footnotes in Water-Supply Papers 777, 817, 840, 845, or 886. Where measuring points have been changed, corrections for the change in altitude have not been made. None of the depths to water level have been corrected for barometric fluctuations.

#### Arkansas County

280. Fred Hedrich. Equipped with an automatic water-stage recorder. For 1940 the depths to water level whenever the recorder charts were changed, usually at weekly intervals, are given below. Comparison of the 1940 record with previous years may be made by reference to the graph of the lowest water level reached each day since the recorder was installed in Aug., 1928, which was published as figure 1, p. 9, in Water-Supply Paper 840. Lowest water level in 1940, 94.61 feet Aug. 6. Lowest water level in 1939, 94.86 feet Aug. 21. Highest water level in 1940, 89.12 feet Apr. 17. Highest water level in 1939, 88.00 feet Jan. 29. The high points are primarily induced by extreme conditions of low atmospheric pressure.

Water level, in feet below measuring point, 1940 Water Water Date Date Hour Hour level level 2:50 p.m. 2:30 p.m. 90.08 8:00 a.m. 91.01 Jan. July 8:40 a.m. 12 89.61 12 90.35 21 p.m. 90.10 19 9:25 a.m. 93.25 9:45 a.m. 26 8:05 a.m. 93.88 28 89.97 11:00 a.m. 2:00 p.m. 89.97 Reb. 2 2 91.94 Aug. 8:30 a.m. 11:45 a.m. 93.87 89.47 a 8:55 a.m. 18 89.05 16 8:05 a.m. 91.56 10:15 a.m. 5:30 p.m. 23 90.05 23 8:50 a.m. 91.78 Mar. 8:15 a.m. 1 89.35 30 94.05 5:10 p.m. Sept. 8 89.54 6 7:55 a.m. 92.17 3:00 p.m. 11:30 a.m. 8:05 a.m. 14 89.95 13 91.67 22 20 8:45 a.m. 89.63 91.50 29 8:35 a.m. 89.30 27 8:45 a.m. 91.52 Oct. Apr. 5 9:45 a.m. 89.68 7:45 a.m. 91.18 12 5:45 p.m. 89.96 11 11:20 a.m. 91.12 19 9:00 a.m. 89.15 18 7:55 a.m. 91.10 3:15 p.m. 2:20 p.m. 1:20 p.m. 8:00 a.m. 25 89.54 25 90.81 May 89.37 90.55 .3 Nov. 7 5:55 p.m. 9 8 90.93 89.42 10:15 a.m. 18 9:20 p.m. 10:15 p.m. 89.17 15 8:00 a.m. 91.03 22 9:20 a.m. 24 89.19 90.51 8:45 a.m. 90.59 June 89.59 9:40 a.m. 1 29 1:15 p.m. 8:00 a.m. 77 90.12 Dec. 8:45 a.m. 90.47 6 14 93.26 13 10:55 a.m. 90.43 21 8:35 a.m. 90.70 20 11:05 a.m. 90.47 28 8:05 a.m. 92.64 27 9:45 a.m. 89.54

ARKANSAS 11

# Arkansas County -- Continued.

Annual spring measurements, and for a few wells a fall measurement.

have been made as follows:

	Wate	r level, in i	reet belo	w meas	uring poir	nt, 1940	
Well	Date	Time	Water level	Well	Date	Time	Water level
205	Apr. 22	5:00 p.m.	94.14	437	Sept.22	10:40 a.m.	77.54
210	22	4:25 p.m.	92.67		Oct. 2	11:30 a.m.	77.26
261	27	2:45 p.m.	65.53	440	Apr. 24	12:50 p.m.	87.24
293	(a)		_ [	456	24	1:20 p.m.	83.39
304	12	4:25 p.m.	82.51		Sept.14	12:30 p.m.	(e)
311	27	11:45 a.m.	101.81		16	3:30 p.m.	85.57
318	12	9:35 a.m.	87.34		18	3:05 p.m.	85.55
344	24	5:30 p.m.	92.61		20	1:00 p.m.	85.40
353	Sept.22	7:45 p.m.	95.20		22	9.35 a.m.	85.26
362	Apr. 26	5:30 p.m.	56.98		24	1:50 p.m.	95.09
374A	12	5:15 p.m.	39.23		Oct. 2	10:30 a.m.	84.95
378	25	6:25 p.m.	84.91	461	Apr. 24	2:30 p.m.	60.44
392A	25	11:15 a.m.	82.38	465	25	4:00 p.m.	37.45
412	27	4:00 p.m.	c58.99	472	4	12:15 p.m.	52.30
414	26	5:05 p.m.	59.74	475	3	4:35 p.m.	60.62
437	25	2:10 p.m.	74.47	480	26	10:45 a.m.	54.55
	Sept.14	10:45 a.m.	d77.98	486	4	1:10 p.m.	46.16
	16	12:50 p.m.	77.82	499	4	3:05 p.m.	42.44
	18	10:45 a.m.	77.75	501	(b)	_	
	20	11:30 a.m.	77.65	506	26	11:30 a.m.	49.45
				507	26	12:25 p.m.	42.83

The following measurements are reported for the first time:

245. J. W. Darrough. Near NW cor. sec. 22, T. 2 S., R. 4 W. Measuring point, top of pump base at hole under discharge pipe, about 208 feet above sea level.

Water level, in feet below measuring point, 1929-40 Water Water Date Hour Date Hour level level 12:15 p.m. 3:00 p.m. 12:20 a.m. 78.76 Sept. 7, 1934 Apr. 18, 1929 5:00 p.m. 69.56 12:00 p.m. 69:72 3:30 p.m. 70:94 5:00 p.m. 74:14 1:40 p.m. 72:09 4:25 p.m. 74:69 3:30 p.m. ff6:22 May 8 Apr. 15, 1930 h80.00 Oct. 1 Dec. 77.90 5 77.28 Sept.29 Feb. 22, 1935 Apr. 13, 1931 Mar. 15 1:30 p.m. 77.35 Sept.29 Apr. 10, 1936 77.90 9:15 a.m. mar. 3, 1932 Sept.30 28, 1932 22, 1937 79.05 4:30 p.m. g76.23 5:45 p.m. 76.90 2:00 p.m. 76.15 179.84 26, 1938 10:05 a.m. j80.12 25, 1939 10:10 a.m. 9:30 a.m. Mar. 15, 1934 Sept.14 82.30 3:10 p.m. Apr. 22, 1940 80.68

264. C. B. Stephens. SEt sec. 22, T. 2 S., R. 3 W. Measuring point, top of pit at south side, level with land surface. Altitude of measuring point not known. This is an abandoned well near well with pump.

Gravel in pit above water level. No measurement obtained.

No measurement made in 1940. Heavy oil in pit of well. Measurement may not be accurate. Well shut down Sept. 9. C

đ

Pumping

f Pump shut down 1 month.

Pit probably clogged; measurement may not indicate true level. Tape hit pump.

<sup>1</sup> New measuring point, top of pit on north side, about 0.1 foot below old measuring point and about 208 feet above sea level.

j Measurement made from top of pit on north side.

264. C. B. Stephens -- Continued.

	Water	level, in	feet below	measuring point,	1929-40	
Date		Hour	Water level	Date	Hour	Water level
Sept.21 Mar. 10, Apr. 22,	1936 1937	12:05 p.m. 4:20 p.m. 10:10 a.m. 10:45 a.m.	55.47 60.16 62.91 61.41 a60.31	Apr. 26, 1938 25, 1939 25 27, 1940	10:50 a.m. 11:50 a.m. 11:55 a.m. 2:55 p.m. 2:55 p.m.	b61.72 c60.67 d61.29 c63.65 d64.42

274. W. W. Crum. NW $\frac{1}{4}$  sec. 29, T. 5 S., R. 6 W. Measuring point, top of pit, east side, 1 foot above land surface and 195.48 feet above sea level.

	Water	level, in	feet belo	w measuring point,	1928-40	
July 24.	1928	4:25 p.m.	18.65	Feb. 26, 1932	9:00 a.m.	19.63
Aug. 23		2:42 p.m.	18.88	Apr. 30	2:00 p.m.	19.68
Oct. 4		11:00 a.m.	19.22	Sept.26	5:10 p.m.	20.80
Nov. 3		2:35 p.m.	19.32	Mar. 4, 1933	9:00 a.m.	20.72
Jan. 4,	1929	12:45 p.m.	19.20	Sept.28	3:40 p.m.	20.82
Feb. 21		4:30 p.m.	18.84	Mar. 15, 1934	1:10 p.m.	20.33
Mar. 18		9:30 a.m.	18.65	Sept.27	12:50 p.m.	21.34
Мау 2		10:55 a.m.	18.62	Nov. 23	1:00 p.m.	21.55
July 4		9:00 a.m.	e18.77	Dec. 26	1:50 p.m.	21.72
29		2:45 p.m.	19.10	Mar. 7, 1935	8:40 a.m.	21.09
Sept. 6		10:20 a.m.	19.66	15	11:00 a.m.	20.74
25		10:10 a.m.	19.82	Apr. 5, 1937	2:30 p.m.	21.75
May 1,	1930	11:10 a.m.	19.71	Sept.24	11:15 a.m.	22.80
Aug. 29		10:20 a.m.	f20.98	Apr. 2, 1938	2:15 p.m.	21.77
Sept.25		10:30 a.m.	20.94	3, 1939	2:40 p.m.	22.27
May 5,	1931	10:10 a.m.	20.63	Sept. 5	12:05 p.m.	22.52
Sept.25		1:15 p.m.	21.54	Apr. 2, 1940	3:30 p.m.	22.90

305. Pearl Clow.  $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$  sec. 32, T. 3 S., R. 5 W. Measuring point, top of pump base at hole with cover on north side, about 200 feet above sea level.

200	LOVO.						
		Wat	er level, in	feet belo	w measuring point,	1928-40	
July	7,	1928	2:45 p.m.	g48.51	Mar. 4, 1933	10:20 a.m.	46.82
Aug.	23		4:15 p.m.	48.15	Sept.28	4:40 p.m.	m49.47
Oct.	4		1:50 p.m.	48.52	Mar. 8, 1934	11:30 a.m.	m48.47
		1929	1:40 p.m.	44.74	Sept.27	2:00 p.m.	49.45
May	2		12:10 p.m.	44.38	Nov. 26	1:00 p.m.	48.77
Sept	.25		11:25 a.m.	h48.10	Dec. 26	3:30 p.m.	48.80
			10:30 a.m.	47.30	Mar. 7, 1935	10:20 a.m.	48.52
May	1,	1930	8:40 a.m.	45.30	6, 1936		48.79
Sept.	. 25			48.69	Sept. 2		51.95
Oct.			12:20 p.m.	48.14	Apr. 5, 1937	5:15 p.m.	
		1931	12:15 p.m.	46.29	Sept.24	10:15 a.m.	50.99
Aug.			12:00 p.m.	151.90	Apr. 2, 1938	4:00 p.m.	50.09
Sept.			3:30 p.m.	j48.47	May 3, 1939	3:45 p.m.	
		1932	8:05 a.m.	46.95	Sept. 5	3:00 p.m.	
				46.66	Apr. 2, 1940	4:50 p.m.	49.97
Sept.	.26		6:45 p.m.	k47.70	l		

- a Altitude 212 feet -- West well.
  b Altitude 213 feet -- East well.
  c West well measured from top of pit.
  e East well measured from top of pit.
  e Well not used this season.

- Pumped for about 3 weeks for irrigating corn and cotton; no rice irrigated.
  - g Pump shut down 9:00 a.m.
- h Pump shut down stou a.m.

  h Pump shut down about Sept. 17.

  1 Pump shut down Aug. 25, having pumped 51 days.

  j Measuring point settled about 2 inches.

  k Pit settled 14 inches during pumping season and 2 inches in 1931, thus making the measuring point 16 inches lower than the original point.

  Measurement taken from the new point.

  m Measured from old measuring point, which was restored.

355. W. A. Fehrenbaker. SEINEI sec. 21, T. 3 S., R. 3 W. Measuring point, top of pump base, 0.3 foot above land surface and 204.10 feet above sea level. With a few exceptions water level in well has been lower at each measurement than at the previous one and the measurements may not represent the time around represent the time around represent the second representation of the secon may not represent the true ground-water level.

	Water level, in	feet below	measuring point,	1928-40	
Date	Hour	Water level	Date	Hour	Water level
July 30, 19 Sept.22 Dec. 31 Mar. 5, 19 Apr. 16 July 11 Aug. 3 Sept. 7	11:05 a.m. 1:50 p.m.	66.44 66.61 66.48 66.58 66.76 66.84 67.02	Apr. 15, 1931 Sept.26 28, 1932 Mar. 2, 1933 Sept.29 Mar. 14, 1934 Sept. 8 Mar. 1, 1935	11:45 a.m. 8:45 a.m. 12:40 p.m. 5:30 p.m. 10:20 a.m. 12:30 p.m. 12:00 p.m. 3:20 p.m.	68.50 569.40 669.70 69.95 d70.18 70.55 e70.75 70.95
23 Apr. 16, 19 Sept. 3	9:45 a.m.	67.03	14 fApr. 3(?),1937 Apr. 27, 1939 27, 1940	5:00 p.m. 12:35 p.m. 2:20 p.m. 5:00 p.m.	71.11 72.23 g73.27 73.88

362. H. Bothe estate. NW1 sec. 22, T. 3 S., R 2 W. Measuring point, top of pump base at small hole, 0.5 foot above land surface and 199.53 feet above sea level.

Water level, in feet below measuring point. 1928-40

	Wat	er level,	in feet below	measuring point,	1928-40	
Aug. 15,	1928		50.20	Apr. 20, 1932	11:50 a.m.	54.36
Sept. 1			50.39	Sept. 8	4:30 p.m.	55.25
Oct. 9		3:40 p.:	m. 50.82	27	4:30 p.m.	155.52
Mar. 1,	1929	1:30 p.:		0ct. 18	12:10 p.m.	
Apr. 17		5:30 p.:		Mar. 2, 1933	10:30 a.m.	
May 10		5:12 p.:		Sept.29, 1933		j54.62
26		10:50 a.:		Oct. 17	9:20 a.m.	54.87
July 11		9:30 a.:		Mar. 14, 1934	2:30 p.m.	
Aug. 3		10:15 a.:		Sept.10	3:00 p.m.	
Sept.,0		11:30 a.:		_ 28	11:15 a.m.	56.42
Oct. 15		12:00 p.:		0ct. 17	12:40 p.m.	
15		5:25 p.:		Mar. 1, 1935	1:45 p.m.	
Apr. 16,	1930	12:45 p.:		14	3:15 p.m.	
Aug. 11		12:45 p.:		18, 1936	• • • • • • • • •	
Sept. 3		3:00 p.:		Sept.16	• • • • • • • • •	
26		12:20 p.:		Apr. 19, 1937	5:30 p.m.	
Oct. 15		4:00 p.:		Sept.24	3:20 p.m.	
Apr. 15,	1931	2:00 p.:		Apr. 23, 1938	2:45 p.m.	
Sept. 4		7:45 a.:		Sept.12	9:25 a.m.	
26		9:45 a.:		Apr. 22, 1939	2:50 p.m.	
Oct. 15		4:00 p.:		26, 1940	5:30 p.m.	56.98
Feb. 25.	1932	9:45 a.:	n. 55.60			

- a Pump shut down about Aug. 27.
  b Well pumped recently.
  c Well not pumped in 1932.
  d Well not pumped in 1935.
  e Well shut down several days before measurement was made.
- Exact date not known; either Apr. 3 or Apr. 30. Well pumped in 1938.
- Measurement uncertain.
- Well not pumped in 1932

- i Well not pumped in 1932
  j Well not pumped in 1933.
  k Well not pumped in 1934.
  l Apparently same pump in well and same measuring point, but equipped with electric motor. Hole caved around well that was about 15 feet in diameter and 9 feet deep with nearly straight sides. This may explain high water level in 1937. Well may have been pumped in 1937.

  m Measured from top of pit, level with land surface; pump out of well.
  n Measured from base of pump.
  o Measured from top of pit.

J. T. McWilliams. SELNEL sec. 35, T. 3 S., R. 2 W. Measur top of pump base, about level with land surface. Altitude ing point. of measuring point unknown.

Water level, in feet below measuring point, 1929-40 Water Water Date Hour Date Hour level level 9:45 a.m. 3:10 p.m. 10:20 a.m. May 26, 1929 3:25 p.m. 11:15 a.m. 50.32 Mar. 2, 1933 54.63 Sept.29 Aug. 53.58 54.15 Sept.10 1:10 p.m. Oct. 17 52.85 a54.45 3:30 p.m. 54.77 Oct. 15 Apr. 16, 1930 52.23 Mar. 14, 1934 4:10 p.m. 2:45 p.m. 51.62 Sept.28 9:10 a.m. 56.51 Sept.26 4:45 p.m. 55.48 Mar. 1, 1935 11:30 a.m. 55.85 Oct. 15 Apr. 15, 1931 1:30 p.m. 3:40 p.m. 14 54.10 55.82 1:00 p.m. 54.30 18, 1936 55.18 . . . . . . . . . . Sept.26 1:00 p.m. 56.00 Sept.16 58.77 4:45 p.m. 2:10 p.m. Oct. 15 2:00 p.m. 55.67 Apr. 19, 1937 54.35 54.76 23, 1938 Apr. 20, 1932 Sept.27 11:25 a.m. 9:40 a.m. 53.54 2:35 p.m. 55.38 22, 1939 55.63 26, 18 10:40 a.m. 55.50 1940 5:15 p.m. 57.69 Oct.

415. J. W. Watkins. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 19, T. 4 S., R. 2 W. Measuring point, top of outer raised rim of pump base, level with land surface. Altitude of measuring point not known.

	Water	level	, in	feet	below	measu	iring	point,	1929-4	10	
Sept.10,	1929	2:40	p.m.	b67.	96	Oct.	17,	1934	8:20	a.m.	68.48
26,	1930	5:20	p.m.	69.	.12	Dec.	6		4:30	p.m.	66.96
26.	1931	2:30	p.m.	69.	16	Mar.	l,	1935	10:00	a.m.	65.08
Oct. 15		5:00	p.m.	67.	90		14		10:40	a.m.	64.95
Sept.27,	1932	10:30	p.m.	c68.	65		18,	1936			61.10
Oct. 18		8:00	a.m.	67.	.98	Sept	.23				70.50
Mar. 2,	1933	1:45	p.m.	64.	.38	Apr.	19,	1937	2:45	p.m.	66.28
Sept.29		6:00	p.m.	67.	.62		19.	1938	3:30	p.m.	65.98
Oct. 17		12:30	p.m.	d67.	19	Sept.	.12		10:30	a.m.	71.07
Mar. 14,	1934	5:30	p.m.	63.	.51	Apr.	22,	1939	12:30	p.m.	67.16
Sept.28		7:15	a.m.	68.	.90				3:30	p.m.	66.12

420. Price. Near NE cor. sec. 30, T. 4 S., R. 1 W. Measuring point, top of pump base at hole under west side of base, 186.85 feet above sea level.

above bec						
	Wat	er level, in	feet belo	w measuring point,	1928-40	
Sept. 1,	1928	p.m.	44.05	Apr. 20, 1932	12:00 p.m.	46.29
Oct. 9		5:20 p.m.	43.90	Sept.28	8:20 a.m.	47.09
Mar. 7,	1929	11:30 a.m.	44.04	Oct. 18	9:00 a.m.	47.21
Apr. 17		3:40 p.m.	43.54	Mar. 2, 1933	8:40 a.m.	47.49
May 10		3:25 p.m.	43.40	Sept.29	3:40 p.m.	46.55
26		12:50 p.m.	43.26	Oct. 17	11:10 a.m.	e <b>46.</b> 67
July 11		p.m.	42.77	Mar. 14, 1934	4:40 p.m.	47.05
July 11 Aug. 3		p.m.	42.68	Sept.10	5:45 p.m.	f51.85
Sept.10		1:40 p.m.	43.16	28	8:00 a.m.	47.57
Oct. 15		2:05 p.m.	43.22	Oct. 17	9:40 a.m.	g <b>47.</b> 56
Apr. 16,	1930	3:30 p.m.	43.35	Mar. 1, 1935	10:45 a.m.	47.80
Aug. 11		ll:45 a.m.	43.60	14	12:15 p.m.	
Sept. 3		4:45 p.m.	44.14	20, 1936		46.94
Oct. 15		1:00 p.m.	44.45	Sept.16	• • • • • • • • •	h47.88
Apr. 15		4:20 p.m.	45.54	Apr. 19, 1937	4:20 p.m.	47.28
Sept.26,	1931	1:40 p.m.	45.54	23, 1938	1:35 p.m.	
Oct. 15		1:15 p.m.	46.63	22, 1939	2:00 p.m.	
Feb. 25,	1932	11:00 a.m.	47.00	26, 1940	4:50 p.m.	48.24

- Well pumped in 1933.
- b
- Pump shut down Sept. 6 Pump shut down 2 weeks before measurement was made. c
- đ Well pumped in 1933.
- Well not pumped in 1933. Well pumped in 1934. е
- f
- Measurement may be in error 0.04 foot
- Measured from bottom edge of pump base.

457. Missouri State Life Insurance Co. (?). SEL SEL sec. 31, S., R. 3 W. Measuring point, top of pit, level with land surface 188.67 feet above sea level. This is an abandoned well about 50 feet nwest of well with pump. See well 457-A for record of measurements hat well.

Water level. in feet below measuring point, 1928-40

	110.00	11 10 10 11	TOOD DOTO	" measuring points	1000-10	
		Hour	Water level	Date	Hour	Water level
	1928		a73.55	Sept.22, 1932	4:20 p.m.	70.09
.22		1:20 p.m.	67.50	Feb. 24. 1933		f68.80
16		2:30 p.m.	65.19	Sept.23	1:30 p.m.	72.50
15,	1929	6:30 p.m.	(b)	24, 1934	2:00 p.m.	71.40
.10		3:30 p.m.	72.49	Feb. 23, 1935	3:00 p.m.	68.53
23		11:15 a.m.	70.82	Mar. 13, 1936		69.18
24,	1930	4:45 p.m.	65.23	Apr. 7, 1937	11:00 a.m.	70.18
15		2:45 p.m.	64.97	Sept.22	2:40 p.m.	72.64
.22		3:30 p.m.	68.52	Apr. 8, 1938	9:20 a.m.	70.30
29,	1931	11:00 a.m.	(c)	4, 1939	11:24 a.m.	71.56
.22		12:00 p.m.	(d)	Sept.20	11:40 a.m.	74.64
24,	1932	3:40 p.m.	e65.50	Apr. 3, 1940	3:50 p.m.	71.07

457-A. Missouri State Insurance Co. (?). SELSEL sec. 31, T. 5 S., W. Measuring point, top of pump base, 0.5 foot above land surface 189.13 feet above sea level. This is well with pump about 50 feet heast of abandoned well 457.

	Water level, in	feet bel	ow measuring point	1929-40	
15, 192	9 6:30 p.m.	63.60	Mar. 1, 1934	4:50 p.m.	67.96
.10	3:30 p.m.	72.90	Sept.11	9:10 a.m.	171.54
23	11:15 a.m.	71.18	24	1:50 p.m.	70.76
29, 193	l 11:00 a.m.	66.17	Feb. 23, 1935		68.87
15	11:00 a.m.	66.26	Mar. 13, 1936		69.51
.22,	12:10 p.m.	g70.85	Apr. 7, 1937	11:00 a.m.	70.55
24, 193	2	67.42	Sept.22	2:40 p.m.	73.99
20	5400 p.m.	66.85	Apr. 8, 1938	9:25 a.m.	69.86
.22	4:20 p.m.	h70.28	4. 1939	11:25 a.m.	71,20
24, 193	3 5:50 p.m.	67.28	Sept.20	11:40 a.m.	75.02
.23	1:45 p.m.	71.11	Apr. 3, 1940	3:45 p.m.	171.40

458. Peter Schaefer. SEt sec. 36, T. 5 S., R. 3 W. Measuring t, top of pump base, about level with land surface and 189.48 feet e sea level.

Wa	ter level, in	feet belo	w measuring point,	1928-40	
14, 1928	p.m.	60.66	Sept.23, 1932	4:00 p.m.	66.42
8, 1929	9:10 a.m.	59.58	Mar. 1, 1933	5:20 p.m.	65.00
15	5:50 p.m.	59.51	Sept.23	10:20 a.m.	k65.32
.10	6:10 p.m.	62.18	Mar. 1, 1934	4:00 p.m.	63.91
23	5:20 p.m.	61.85	Sept.24	12:40 p.m.	166,32
20, 1930	4:20 p.m.	60.18	Feb. 23, 1935	2:00 p.m.	65.37
24	4:00 p.m.	59.84	Mar. 14, 1936		64.18
.22	2:55 p.m.	65.32	Apr. 19, 1937	12:30 p.m.	64.96
29, 1931	7:30 a.m.	63.59	19, 1938	5:50 p.m.	64.96
.23	7:30 a.m.	63.59	20, 1939	4:10 p.m.	65.32
23, 1932	5:30 p.m.	65.02	24, 1940	2:45 p.m.	65.80
20	4:30 p.m.	64.03		-	

- Pump operating in nearby well.
- b Well apparently dry at about 65 feet, but judging from later urements tape probably was lodged on obstruction.

  c Well reported dry at 66 feet by observer; tape probably lodged on
- ruction.
- Tape seemed to hit mud at 73 feet. Measured to obstruction. d
- Obstruction at 67 feet.

- Electric plant.
  Well pumped in 1932.
  Well not pumped in 1934.
- Measuring point 1 inch above top of pit. Pump shut down 3 weeks.
  Well pumped in 1934.

484. George M. Forman Co.  $NE_4^1NW_4^1$  sec. 32, T. 6 S., R. 2 W. Measuring point, bottom of hole in side of pump, 0.5 foot above land surface and 183.96 feet above sea level.

Water level, in feet below measuring point, 1928-40 Water Water Date Hour Date level level July 31, 1928 Apr. 28, 1931 5:15 p.m. 9:15 a.m. 49.87 41.66 6:00 p.m. 6:10 p.m. 4:55 p.m. 11:00 a.m. Aug. 30 49.70 51.82 May 16 Sept.23 Sept.13 8:40 a.m. b55.60 46.00 Feb. 24, 1932 8:10 a.m. 22 45.96 40.58 46.37 Apr. 21 Nov. 10 8:40 a.m. 43.40 11:30 a.m. 12:30 p.m. 2:10 p.m. 4:20 p.m. 10:00 a.m. Mar. 6, 1929 2:00 p.m. 11:55 a.m. 41.65 Sept. 9 55.47 23 40.70 13 53.27 3:45 p.m. 10:40 a.m. 10:40 a.m. Feb. 24, 1933 Sept.22 Mar. 7, 1934 Apr. 10 31.98 47.68 May 11 31.38 c52.19 29 32.53 48.46 8:30 a.m. 8:00 a.m. 10:00 a.m. Sept.11 4:45 p.m. 10:40 a.m. July 10 48.40 d54.81 54.25 21 Aug. 8 e55.75 53.98 Feb. 28, 1935 1:15 p.m. Sept. 9 50.60 3:05 p.m. 3:50 p.m. 11:00 a.m. 23 Mar. 13, 1936 Sept.29 49.18 48.75 . . . . . . . . . . Jan. 24, 1930 Mar. 20 43.35 54.49 10:30 a.m. 41.05 Apr. 16, 1937 44.14 15, 1938 Sept.12 2:30 p.m. 12:10 p.m. 3:50 p.m. 7:00 a.m. Apr. 17 42.07 10:30 a.m. 44.14 1:35 p.m. 11:30 a.m. 58.30 25 42.85 Aug. 28 a62.12 Apr. 14, 1939 47.16 54.97 Sept.23 Sept.20 2:50 p.m. 53.45 9:45 a.m. Apr. 16, 1931 50.01 1940 11:15 a.m. Apr. 26, 51.88

491. Cunningham and Felt. Spanish grant 2358, equivalent to sec. 24, T. 7 S., R. 4 W. Measuring point, top of pump base, about 0.1 foot above land surface and about 180 feet above sea level.

	Wate.	TOAGT TIL	Teer Deroi	M WESSITTING DOTTILE	1920-40	
Sept.19,	1928	p.m.	32.91	Mar. 13, 1936		34.02
Dec. 9		12:30 p.m.	33.87	Apr. 6, 1937	5:20 p.m.	31.98
Sept. 9,		4:20 p.m.	32.40	8, 1938	1:45 p.m.	32.08
Aug. 28,			33.82	4, 1939	1:40 p.m.	34.52
Sept.24,	1934	4:15 p.m.	f35.82	4, 1940	1:45 p.m.	35.81

In feat below measureless maint

492. A. M. Lowe. SE cor. sec. 3, T. 7 S., R. 3 W. Measuring point, top of iron plate on which pump rests level with land surface and about 182 feet above sea level.

	Water	TeAel	., 1n	Leer perc	w measuring point,	1928-40	
Sept.13,	1928	1:30	p.m.	43.74	Apr. 21, 1932	11:00 a.m.	43.06
22		2:35			Sept. 9	8:20 a.m.	47.18
Nov. 10		3:00	p.m.	42.60	23	8:45 a.m.	h46.73
Apr. 16,	1929	3:00	p.m.	39.09	Mar. 1, 1933	1:40 p.m.	45.00
May 11		3: 45	p.m.	38.04	Sept.23	7:00 a.m.	145.17
29		4:45	p.m.	g38.15	Mar. 7, 1934	2:20 p.m.	43.28
Sept. 9		3:00	p.m.	g43.87	Sept.11	11:45 a.m.	<b>j46.</b> 79
23		12:55	p.m.	43.43	24	6:00 p.m.	j46.36
Apr. 17,	1930	9:15	a.m.	40.40	Feb. 28, 1935	4:15 p.m.	45.28
Aug. 28			a.m.	g47.14	Mar. 13, 1936		43.09
Sept.22		5:00	p.m.	46.14	Apr. 7, 1937	3:50 p.m.	42.91
Apr. 16,	1931	1:30	p.m.	44.20	8, 1938	4:15 p.m.	43.16
Sept. 4		11:00	a.m.	47.04	Sept.12	12:45 p.m.	k46.59
22		2:45	p.m.	46.98	Apr. 4, 1939	3:00 p.m.	44.64
Feb. 24.	1932	10:30	a.m.	43.85	4, 1940	3:20 p.m.	45.65

- Pump shut down 7:00 p.m. Aug. 27; started 4:00 p.m. Aug. 28. Pump shut down Sept. 17.
- 'n
- đ

W-+-- 7 --- 7

- Several pumps operating nearby.
  Well pumped in 1934.
  Pump shut down 1 hour before measurement was made.
- Well not pumped in 1934; measured from land level.
  Pump operating in well 0.25 mile south.
- Well not pumped in 1932.
- Well not pumped in 1933. 1
- Well pumped in 1934 Well abandoned.

ARKANSAS

17

### Arkansas County -- Continued.

514. J. M. Satchfield. SELNWL sec. 33, T. 7 S., R. 2 W. Measuring point, top of outer raised rim of pump base, level with top of concrete foundation and 181.85 feet above sea level. This well is east of an abandoned well.

Water level, in feet below measuring point, 1928-40 Water Water Date level level 9:10 a.m. July 31, 1928 30.63 Sept.23, 1931 50.34 . . . . . . . . . . Aug. 30 Sept.13 42.50 Feb. 24, 1933 2:45 p.m. 38.79 5:15 p.m. 5:20 p.m. 1:45 p.m. 5:10 p.m. 1:05 p.m. 3:40 p.m. 4:00 p.m. 8:00 a.m. a64.95 Sept.22 4:45 p.m. b47.45 7, 1934 41.76 22 Mar. p.m. 42.09 Oct. 30 43.00 Feb. 28, 1935 2:15 p.m. 44.12 Apr. 16, 1929 19.74 42.49 Mar. 13, 1936 . . . . . . . . . . īı Мау 20.86 Sept.29 48.34 12:30 p.m. 10:55 a.m. 29 16.12 Apr. 16, 1937 36.96 Sept.23 45.55 Sept.22 47.68 12:00 p.m. 12:50 p.m. 5:10 p.m. Apr. 16, 1938 Apr. 17, 1930 35.70 31.18 Sept.23 49.90 14, 1939 35.12 46.97 Apr. 16, 1931 11:10 a.m. Sept.20 44.45 4:25 p.m. Sept.23 52.25

B 87. W. E. Boyd. Center north side sec. 31, T. 2 S., R. 5 W. Measuring point, hole north side, 0.9 foot above land surface.

Water level, in feet below measuring point, 1935-40 Apr. 24, 1935 62.18 60.35 Apr. 5, 1937 9:30 a.m. 63.80 Sept.11 2, 1938 63.31 Apr. 13, 1936 3, 1939 1:13 p.m. 63.80 60.87 Sept.16 2 64.95 1940 2:00 p.m. 63.84

B 91. Enders.  $SE_{2}^{1}$  sec. 10, T. 2S, R. 4 W. Measuring point, hole in west side, 0.4 foot above land surface and about 208 feet above sea level.

Water level, in feet below measuring point, 1935-40 Sept.15, 1936 83.33 May 24, 1935 79.40 Sept.16 Apr. 15, 1937 81.70 81.07 . . . . . . . . . . • • • • • • • • • 14, 1938 Mar. 9, 1936 Apr. 10 79.98 10:25 a.m. 81.80 12, 1939 3:00 p.m. 79.95 82.87 Sept.15 83.40 22, 1940 3:50 p.m. 82,67 . . . . . . . . . .

B 110.  $N_2^{\frac{1}{2}}$  sec. 20, T. 3 S., R. 5 W. Measuring point, hole in southwest side, 0.5 foot above land surface.

Water level, in feet below measuring point, 1935-40 Apr. 11, 1938 10, 1939 Apr. 18, 1935 79.05 10:05 a.m. 82.75 . . . . . . . . . . Sept.12 84.08 10:20 a.m. 82.72 Mar. 30, 1936 Sept. 7 84.02 79.66 3:25 p.m. 5:55 p.m. Apr. 12, 1940 Sept.16 . . . . . . . . . . 84.60 83.62 80.87 Apr. 10, 1937

B 133. Snow Wilson (Goetz).  $SW_{4}^{1}NW_{4}^{1}$  sec. 21, T. 4 S., R. 5 W. Measuring point, top of pit, 0.4 foot above land surface.

Water level, in feet below measuring point, 1935-40 Apr. 26, 1935 66.00 10:38 a.m. 68.79 . . . . . . . . . . Apr. 4, 1938 Sept.13 Sept. 5 3:45 p.m. 75.70 70.22 Apr. 12, 1937 3, 1940 1:40 p.m. 68,23 Apr. c68.59 12:10 p.m. 4, 1938 68.57 Apr.

B 171. South side sec. 13, T. 5 S., R. 3 W. Measuring point, edge of pit on east side, 0.5 foot above land surface and about 192 feet above sea level.

 Water level, in feet below measuring point, 1937-40

 Apr. 19, 1937
 73.82

 Apr. 22, 1939
 11:15 a.m.

 20, 1938
 73.63

 21, 1939
 2:55 p.m.

 22, 1939
 74.74

- a Measurement made while pump was operating.
- b Several nearby pumps operating.
- c Measuring point, 0.25 foot above top of pit.

B 189. W. J. Bohnert.  $NW_{\frac{1}{4}}$  sec. 32, T. 7 S., R. 3 W., on State Highway 1. Measuring point, edge of hole in side of pump.

	Water level, in	feet bel	ow measuring	g point,	1937-1940	
Date	Hour	Water level	Date		Hour	Water level
Apr. 7, 193 8, 193		29.97 29.45	Apr. 4,	L <b>94</b> 0	2:10 p.m.	31.25

B 192. Sec. 5, T. 8 S., R. 3 W. Measuring point, edge of outer raised rim of base on east side, about 1 foot above land surface and about 179 feet above sea level.

	Wat	<u>er level, in</u>	feet bel	ow measuring point	, 1937-40	
Apr.	7, 1937		27.04	Sept.20, 1939	1:35 p.m.	31.36
	8, 1938	3:45 p.m.	26.55	Apr. 4, 1940	2:30 p.m.	32.88
	4, 1939	2:15 p.m.	29.39		-	

#### Jefferson County

270. Water level, in feet below measuring point, 1940: Apr. 2, 3:15 p.m., 18.57.

#### Lonoke County

	Wate	er level, in	feet bel	ow meas	uring poi	nt, 1940	
Well	Date	Hour	Water level	Well	Date	Hour	Water level
1			(a)	61	May 2	·12:50 p.m.	49.40
8	May 2	3:05 p.m.	49.94	78	2		(b)
10	ž 2	4:25 p.m.	59.49	126	2	9:55 a.m.	38.62
28	2	4:35 p.m.	69.85	127	2	9:30 a.m.	c35.68

The following measurments are reported for the first time:

5. Carl Lilly. SE cor. SW $\frac{1}{4}$  sec. 31, T. 3 N., R. 7 W. Measuring point, top of raised outer flange of pump base, 0.5 foot above land surface and 243.20 feet above sea level.

	Measuring point	, in feet	below measuring	point, 1929-40	
Date	Hour	Water level	Date	Hour	Water level
May 14, 19 Sept.11 24 Apr. 21, 19 May 21 Sept. 1 Oct. 10 Apr. 20, 19 Oct. 12 13, 19 Feb. 21, 19	4:25 p.m. 12:55 p.m. 12:55 p.m. 12:55 p.m. 12:00 p.m. 3:10 p.m. 4:15 p.m. 12:45 p.m. 12:45 p.m. 12:45 p.m. 2:30 p.m.	47.24 d57.98 56.72 53.12 53.30 e59.06 f52.31 54.19 g56.33 h57.80 55.80	Sept.14, 1934 Oct. 15 Nov. 19 Feb. 19, 1935 Apr. 22 Sept.12 Apr. 24, 1936 May 4, 1937 2, 1938 1, 1939 Sept.21	3:30 p.m. 10:30 a.m. 1:00 p.m. 11:05 a.m. 6:45 p.m. 4:40 p.m. 2:55 p.m.	568.78 57.60 56.92 55.86 55.15 58.68 55.86 58.73 59.25 64.05
0ct. 14 Feb. 28, 1	11:30 a.m. 934 5:00 p.m.		May 2, 1940	4:10 p.m.	59.60

- a No measurement made in 1940.
- b Well caved; no measurement made in 1940.
- Pump in well; measuring point, bottom of hole on south side of C
- pump, 0.3 foot above pit.

  d Stopped pumping Sept. 10.
  e Well not used in 1930
  f Since this measurement shows the water level to have been higher
  than in April and May, 1930, the measurement of Oct. 10 probably was made
  in an old well nearby.
- g Well not pumped in 1931 h Well pumped in 1932; pump shut down a month before measurement was made.
  - i Well pumped in 1933.
- j Well pumped in 1934.

# Lonoke County--Continued.

19. Charles G. Miller. SW1 sec. 26, T. 2 N., R. 8 W. Measuring point, bottom of hole in side of pump, 0.2 foot above top of pit, about 1 foot above land surface and 232.64 feet above sea level.

	Water	level, in	feet below	measuring	point,	1928-40	
Date		Hour	Water level	Date		Hour	Water level
Aug. 3, Sept.24 Nov. 20 Jan. 18, May 13 July 3 Aug. 5 Sept. 4 Feb. 20, Apr. 21 Sept.24, Feb. 20, Apr. 18	1929 1930 1931	12:55 p.m. 11:45 a.m. 2:55 p.m. 4:45 p.m. 2:00 p.m. 3:50 p.m. 3:50 p.m. 1:40 p.m. 11:45 a.m. 10:45 a.m. 12:25 p.m. 4:10 p.m.	47.80 45.60 46.23 46.77 47.42 47.86 49.12 47.01 46.86 50.10 48.50	May 4, 3, 2, Sept. 9	1934	11:35 a.m. 1:15 p.m. 2:00 p.m. 5:10 p.m. 9:30 a.m. 4:20 p.m. 5:40 p.m. 2:35 p.m. 12:20 p.m. 6:25 p.m.	50.75 a49.22 51.60 50.72 49.77 49.72 49.59 50.26 50.98 51.95 54.31 b51.88

27. J. T. Kelly. NELNWL sec. 1, T. 2 N., R. 7 W. Measuring point, top of pump base at hole in side of base on south side, 236.82 feet above sea level.

Water	level, in	feet below	measuring point	nt, 1928-40	
Oct. 25, 1928	5:00 p.m.	56.70	Oct. 13, 193	2 9:00 a.m.	59.62
Nov. 20	4:10 p.m.	56.13	Sept.14, 193	4 4:10 p.m.	f61.55
Jan. 25, 1929	4:45 p.m.	55.04	Oct. 15	9:10 a.m.	60.09
July 3	2:00 p.m.	c59.67	Nov. 19	10:00 a.m.	59.27
Sept.11	5:40 p.m.	61.15	Feb. 19, 193	5 9:20 a.m.	58.00
24	10:45 a.m.	d59.12	Apr. 22	8:40 a.m.	57.26
Apr. 22, 1930	11:15 a.m.	54.51	24, 193	6	58.09
May 21	1:00 p.m.	54.25	May 3, 193	7 5:20 p.m.	59.55
Sept. 1	1:15 p.m.	61.55	2, 193	8 2:20 p.m.	g62.28
• Oct. 10	2:30 p.m.	58.86	1, 193	9 1:35 p.m.	h63.48
Apr. 20, 1931	11:30 a.m.	55.84	2, 194	0 5:25 p.m.	63.18
Oct. 12	11:30 a.m.	e55.84			

37.  $SW_2^1SE_2^1$  sec. 29, T. 2 N., R. 7 W. Measuring point, bottom of hole in side of pump, 0.2 foot above concrete base and 229.2 feet above sea level.

		feet below	measuring point,	1927-40	
Sept.21, 192	7	51.66	Apr. 25, 1932		51.76
Apr. 19, 1928	3	50.20	Sept.24	2:00 p.m.	53.66
Aug. 10		51.29	Feb. 18, 1933	2:20 p.m.	52.87
Sept.24	12:45 p.m.	51.56	Apr. 29	8:30 a.m.	52.39
0ct. 23	10:00 a.m.	51.51	Sept.26	12:10 p.m.	54.06
Jan. 18, 1929			Feb 28, 1934	2:40 p.m.	53.40
Apr. 25	1:00 p.m.	49.88	Aug. 28	3:30 p.m.	64.70
May 13	2:30 p.m.	50.08	Sept.26	5:30 p.m.	54.54
July 3	5:15 p.m.	50.59	Dec. 1	11:00 a.m.	54.24
Aug. 6	5:30 p.m.	51.20	Feb. 20, 1935	9:50 a.m.	53.85
Sept. 4	4:15 p.m.		Apr. 22	2:10 p.m.	53.10
24	4:05 p.m.		24, 1936		53.83
Feb. 20, 1930	3:50 p.m.	50.90	May 4, 1937	4:00 p.m.	54.98
Apr. 21	8:30 a.m.	50.79	3, 1938	5:40 p.m.	55.96
Sept.24	12:05 p.m.	153.22	2, 1939	11:40 a.m.	57.10
Apr. 21, 193	l 2:25 p.m.	152.24	Sept. 9	12:35 p.m.	58.54
Sept. 24	11:00 a.m.	k53.38	May 2, 1940	6:15 p.m.	57.18

- a Well pumped in 1933.
- b Pump out of well; measured from
- top of pit.
  d Well 1 mile northeast operating.
  f Well not pumped in 1934. c No nearby pump operating. e Uncertain measurement.

- g Plant operated, altitude 235 feet.
  h Measuring point, top of projecting base.
  I Pumped in 1930; new pump installed.
  j New measuring point, bottom of hole on north side of pump, 0.25 foot above land surface.
  - k Pump shut down Aug. 25.

#### Monroe County

193. Water level in feet below measuring point, 1940: May 2, 10:55 a.m., 72.81.

The following measurements are reported for the first time:

178. Kreimeir Estate. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 1 S., R. 4 W. Measuring point, top of pit, 1 foot above land surface and 208.2 feet above sea level.

		Wa te:	r level, in	feet belo	w measuring point,	1928-40	
Date			Hour	Water level	Date	Hour	Water level
Sept Nov. Jan. May Sept Apr. Sept	20 13 9, 17 21 23,	1929 1930	11:30 a.m. 4:05 p.m. 10:05 a.m. 2:45 p.m. 5:20 p.m. 1:50 p.m. 1:00 p.m. 3:00 p.m.	67.57 67.28 66.47 65.42 64.14 69.30 66.94 70.50 68.87	Mar. 15, 1934 Sept.12 Oct. 2 Nov. 12 Dec. 4 22 Mar. 6, 1935 15 Apr. 25	5:15 p.m. 2:30 p.m. 11:30 a.m. 2:40 p.m. 3:50 p.m. 2:00 p.m. 12:00 p.m. 4:00 p.m. 2:30 p.m.	70.60 b72.20 72.48 72.27 72.30 72.00 71.20 71.50 71.23
Sept. Feb. Apr. Sept.	29 26, 22 29		1:00 p.m. 3:55 p.m. 11:15 a.m. 11:00 a.m. 3:00 p.m. 3:30 p.m.	70.86 69.54 69.14 a71.65 70.58	30, 1937 30, 1938 29, 1939 Sept.13 May 2, 1940	11:40 a.m. 11:30 a.m. 10:40 a.m. 4:35 p.m. 10:10 a.m.	72.59 c73.14 73.81 75.46 74.02

# Prairie County

	Water level, in feet below measuring point, 1940									
Well	Date	Hour	Water level	Well	Date	Hour	Water level			
55 88 100 116	May 2 1 Apr. 29 29 Sept.19 21 23	2:25 p.m. 4:35 p.m. 5:25 p.m. 5:50 p.m. 9:45 a.m. 9:30 a.m. 10:00 a.m.	61.81 61.19 71.18 74.74 79.69 78.55 77.84	116 122 135 144 159 201	Oct. 4 May 2 Apr. 23 May 1 Apr. 23	9:45 a.m. 12:10 p.m. 10:40 p.m. 5:00 p.m. 9:45 a.m.	77.15 a77.57 45.85 (e) 58.90 47.28			

The following measurements are reported for the first time:

45. Frank Dvorak. NE ${}^{1}_{2}SW_{4}^{1}$  sec. 19, T. 2 N., R. 6 W. Measuring point, top of pump base, level with land surface and 237.80 feet above sea level.

	Water	level,	<u>in</u>	feet below	measuring	point,	1928-40	
Date		Hour		Water level	Date		Hour	Water level
Aug. 1, Sept.24 Jan. 15, Apr. 25 May 13 Sept.12 Feb. 20, Apr. 22 Sept. 1	1929	11:50 4:40 1 11:40 2:00 1 3:00 3:00 9:55 4:45 9:00 1 12:00 1	p.m. p.m. p.m. p.m.	74.85 72.65 67.79 f64.85 64.76 g77.02 75.42 67.90 66.42	Sept.24, Feb. 20, Apr. 21 Sept.24 Feb. 18, Apr. 29 Sept.26 Feb. 20, Aug. 24 Sept.15	1932 1933	3:05 p.m. 3:10 p.m. 6:30 p.m. 5:20 p.m. 9:40 a.m. 7:50 a.m. 5:00 p.m. 2:10 p.m. 2:00 p.m.	74.68 68.94 67.65 h76.74 71.22 69.55 75.05 170.37 77.35 76.40
24 Apr. 21,	1931	9:10 10:25			26 Oct. 15		10:00 a.m. 5:45 p.m.	75.60 74.10

- Pump shut down 10 days before measurement was made. Well pumped in 1934.
- g Pump shut down about
- c Measuring point about 207 feet.
  d Measuring point, top of pit on south side
  e No measurement made in 1940
- de Sept. 5.

  h Pump shut down 2 weeks;
  Nearby pump shut down Sept. 20.

  1 Well pumped in 1933. Well operating Apr. 24.

ARKANSAS

21

#### Prairie County -- Continued.

45. Frank Dvorak -- Continued.

Water level, in feet below measuring point, 1928-40

Date	Hour	Water level	Date	Hour	Water level
Nov. 20, 1934 Dec. 21 Feb. 20, 1935 Apr. 22	9:00 a.m. 1:00 p.m. 10:50 a.m. 5:50 p.m.	73.24 72.54 71.68 70.14	Sept.18, 1936 May 3, 1937 Sept.23 May 2, 1938	1:10 p.m. 10:20 a.m. 1:25 p.m.	79.28 b73.95 c80.07 75.32
Sept.12 Mar. 11, 1936 Apr. 21		277.29 71.17 70.84	1, 1939 Sept. 8 Apr. 30, 1940	12:05 p.m. 2:45 p.m. 4:25 p.m.	76.28 81.48 75.83

97. J. A. Papan. SW cor. sec. 20, T. 1 N., R. 6 W. Measuring point, outer raised rim of pump base, 222.67 feet above sea level.

	Water	level,	in	feet below	measuring	point,	1928-40	
Aug. 18, 3 Sept.18		4:05	p.m.	d62.25 57.40	Feb. 22, Sept. 7		1:25 p.m. 2:10 p.m.	e56.00 f61.37
Nov. 9 Feb. 14.		3:15 2:20			0ct. 20	1933	10:10 a.m. 10:45 a.m.	58.79 g58.52
May 15		3:15	p.m.	53.16	Mar. 12,	1934	10:10 a.m.	57.03
July 9 31		10:30 10:50			Aug. 25 Oct. 19		9:10 a.m. 11:00 a.m.	63.07 58.85
Sept.12 18		4:00 10:40			Nov. 10 Feb. 21.	1935	4:15 p.m. 10:40 a.m.	58 <b>.58</b> 57 <b>.</b> 75
Apr. 26,		2:45	p.m.	53.98	Mar. 13		11:15 a.m.	56.57
Aug. 15 Sept.18		8:45 4:30	p.m.	57.26	Apr. 20, Sept. 9		••••••	58.02 63.97
Oct. 22 Apr. 25.	1931	4:00 11:30			Apr. 27, 27.	1937 1938	2:45 p.m. 2:55 p.m.	59.03 60.10
Sept. 7 Oct. 22		1:30 8:30	p.m.	58.85		1939	2:35 p.m. 5:10 p.m.	`60.60 60.93
000. 22		0.00	a om e	01.00	may 1,	TOZU	O:TO D.m.	00.50

110. F. W. Sickel. NW1NE1 sec. 15, T. 1 N., R. 5 W. Measuring point, outer raised rim of pump base, 0.1 foot above top of pit, 0.3 foot above land surface and 222.6 feet above sea level.

	Water	level	in	feet below	measuring	point,	1928-40	
Aug. 24,	1928	4:30	p.m.	86.87	Feb. 23,	1934	3:10 p.m.	73.78
Nov. 13		12:45			Sept.22		2:50 p.m.	82.18
May 17,	1929	4:40	p.m.	65.67	0ct. 1		9:10 a.m.	80.85
Sept.12		10:55	a.m.	90.33	22		9:40 a.m.	78.30
27		2:20	p.m.	82.10	Nov. 12		10:40 a.m.	77.50
Nov. 13		2:30	p.m.	74.50			2:45 p.m.	76.47
Apr. 23,	1930	10:30	a.m.	68.75	Dec. 4		2:00 p.m.	<b>j</b> 74.38
Sept.29		9:15	a.m.	81.44	22		10:45 a.m.	j76.90
Nov. 19		10:15			Feb. 20,			74.42
Apr. 22,	1931	9:15					9:30 a.m.	73.19
25		9:20					9:20 a.m.	72.75
Aug. 28						1936		79.21
Sept.29		9:15				1937	5:20 p.m.	75.05
Feb. 22,	1932	10:00				1938	5:05 p.m.	k76.26
Apr. 22		9: 00			Sept. 9		4:55 p.m.	92.10
Sept.29		2: 20			Apr. 28,			77.26
Feb. 21,		9:30			Sept. 8		5:30 p.m.	94.47
Oct. 12		2:30	p.m.	76.95	May 2,	1940	1:05 p.m.	78.33

- a Measuring point 0.3 foot higher.
  b Measuring point, bottom of hole on west side, 1.20 feet above land surface and 1.10 feet higher than old measuring point.
  c Well equipped with new electric pump. Measuring point, hole inside base, about .6 foot above land surface; cannot compare accurately with old measurements. with old measurements.
  - d Pump shut down Aug. 17.
- Approximate measurement since surface water apparently was dripping into well.
- f Well nearby pumping. g Well not pumped in 1933 h Pump shut down Aug. 25. i Measured from top of casing, 0.25 foot below measuring point; pump removed for new setting.

  - j Surface water dripping into well k Measuring point about 223 feet above sea level.

#### LOUISIANA

#### By J. C. Maher and T. B. Stanley, Jr.

Periodic measurements of water level and artesian pressure in observation wells in Louisiana were continued in 1940 as a part of the cooperative ground-water investigations by the Federal Geological Survey and the Louisiana State Department of Conservation. At the end of the year observations were being made on 117 wells in 18 parishes (see fig. 2). At the beginning of the year 116 wells in 10 parishes were under observation. The 18 parishes include Acadia, Allen, Avoyelles, Bienville, Calcasieu, East Baton Rouge, East Carroll, East Feliciana, Evangeline, Grant, Jefferson Davis, LaSalle, Livingston, Morehouse, Rapides, Tangipahoa, St. Tammany, and Washington. Measurements were made weekly in 4 wells in Alexandria (Rapides Parish) and in 2 wells in Baton Rouge (East Baton Rouge Parish); biweekly in 13 wells in Grant, LaSalle, and Rapides Parishes; and monthly in 21 wells in Acadia, Allen, Evangeline, and Jefferson Davis Parishes. Water-stage recorders were operated on 4 wells in East Baton Rouge Parish, on 4 wells in Rapides Parish, on 2 wells in Allen Parish, and on 1 well in each of Acadia, Calcasieu, and Morehouse Parishes. Other observation wells were measured at irregular intervals. Approximately 1,325 individual measurements of water level were made in the observation wells in 1940. Most of the measurements were made by employees of the Federal Geological Survey, but some were supplied by E. J. Cheney, Superintendent of the Lake Providence water works. The records from a water-stage recorder operated on well Al-29, at Elizabeth, were obtained through the cooperation of W. E. Emigh of the Calcasieu Sulphate Paper Company.

In January 1940 Geological Bulletin 17 of the Louisiana State Department of Conservation, entitled "Ground-water resources of Rapides Parish,

Louisiana" was published. This was followed by a geological pamphlet on

<sup>1/</sup> Maher, J. C., Preliminary report on ground-water conditions at Alexandria, Louisiana: La. Dept. Cons. Geol. Pamph. 2, 1940.

LOUISIANA 23

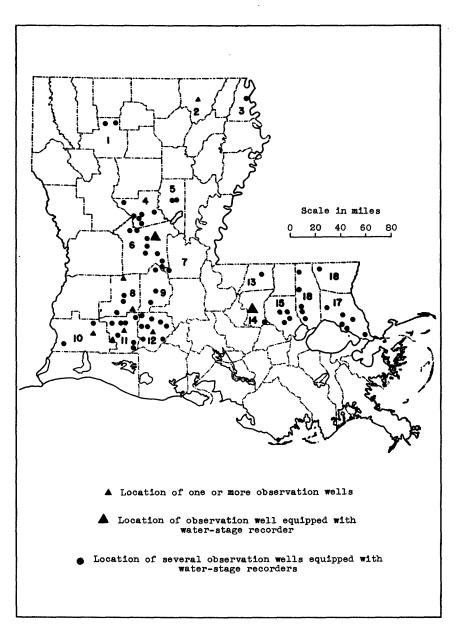


Figure 2.--Map of Louisiana showing location of observation wells.

ground-water conditions at Alexandria, and two articles in the Louisiana Conservation Review. A report on the ground-water resources of Grant and LaSalle Parishes was sent to press in December to be published as a geological bulletin of the Louisiana Department of Conservation. In September detailed field investigations were completed in Jefferson Davis and Acadia Parishes, which comprise the principal rice-irrigation area of the State, and a report on this area is now in preparation. A study of the potential ground-water supply in the industrial area of Baton Rouge, where increasingly heavy pumpage has created a serious problem, was begun in 1940 and will be continued in 1941.

#### NORTHERN LOUISIANA

Four observation wells were established in northern Louisiana in 1940--at Lake Providence (East Carroll Parish), Bastrop (Morehouse Parish), Gibsland (Bienville Parish), and Arcadia (Bienville Parish). The wells tap artesian water in sands of the Eocene series at depths from 470 to 655 feet. An automatic water-stage recorder was installed on the well at Bastrop, where heavy pumpage for paper mills is reported to have caused the water levels to decline considerably.

#### CENTRAL LOUISIANA

Observations were continued in 1940 on 49 wells in Rapides, Grant, LaSalle, and Avoyelles Parishes. A total of 553 measurements of water levels were made in 35 wells in Rapides Parish; 172 measurements were made in 10 wells in Grant Parish; 78 measurements were made in 3 wells in LaSalle Parish, and 1 measurement was made in 1 well in Avoyelles Parish.

The water levels in wells in Grant, LaSalle, and Avoyelles Parishes during 1940 were at stages comparable with those recorded in 1939. The consumption of ground water in these parishes is very small compared to that in Rapides Parish.

<sup>2/</sup> Maher, J. C., and Stanley, T. B., Progress of ground-water investigations in Louisiana: La. Cons. Rev., winter issue, 1939-40. Maher, J. C., Ground water in Grant and LaSalle Parishes, Louisiana: La. Cons. Rev., spring issue, 1940.

LOUISIANA 25

The water levels in wells in or near Alexandria, in Rapides Parish, continued to show considerable fluctuation due to pumpage for municipal and industrial purposes. The water levels of the principal water-bearing sand, the "1,000-foot sand", were in general lower in 1940 than in 1939. The average of the weekly water levels in well 26, near the Monroe Street pumping station, was 98.20 feet below the measuring point in 1940 as compared to 96.95 feet in 1939. The water level in this well, however, rose in November to 91.76 feet below the measuring point, which is only 2.96 feet lower than the highest stage recorded since observations were begun in 1938 (See fig. 3, well 26). This rise was probably caused by the cessation of pumping from well 1, which is situated near well 26, and can not therefore be regarded as indicating improved ground-water conditions in the area. The water levels in wells tapping the "1,000-foot sand" at the City Park pumping station continued to decline in 1940 with only minor interruptions (See fig. 3, well 35). The average of the weekly water levels in well 35, near the City Park pumping station, was 108.43 feet below the measuring point in 1940 as compared to 99.57 feet in 1939. The continued decline of the water level in this well illustrates the serious problem of ground-water supply in the area.

#### SOUTHEASTERN LOUISIANA

Water-level measurements in wells in Tangipahoa and St. Tammany
Parishes were made in 1940 during the strawberry irrigation season. More
water than usual was required in May because of a rather prolonged period
of dry weather. As a result of the combination of increased draft for
irrigation and dry weather the water levels in 1940 were 1 to 2.5 feet
lower than in 1939.

Observations were extended into four nearby parishes. Ten observation wells were located in East Baton Rouge Parish, four in Livingston Parish, one in East Feliciana Parish, and one in Washington Parish. Four waterstage recorders were installed on wells in the industrial area north of Baton Rouge. The water in the parishes is derived from thick Pleistocene sands and gravels at depths ranging from 300 to 2,100 feet. The water is under artesian pressure and most wells flow at the surface. The shut-in water pressures range from a fraction of a pound to about 60 pounds to the square inch.

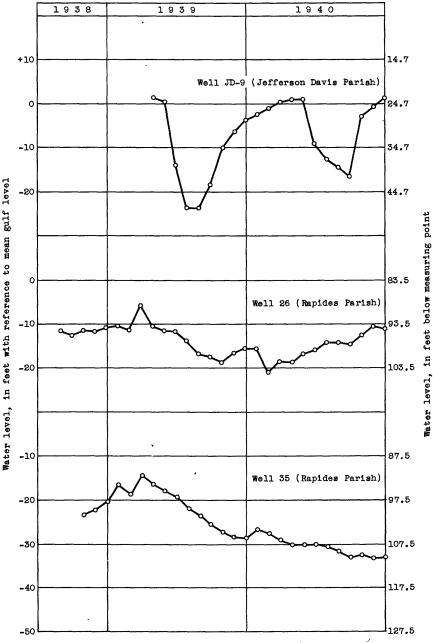


Figure 3.--Graphs showing fluctuations of water level in wells in Louisiana.

LOUISIANA 27

Perhaps the most concentrated withdrawal of ground water in the State is made north of Baton Rouge in East Baton Rouge Parish where estimates indicate that during the summer the pumpage, which is chiefly for cooling purposes, amounts to approximately 50 million gallons of water a day. The withdrawal of large quantities of water from the "400-foot sand" and the "700-foot sand" in this area has resulted in the decline of the non-pumping water level from 44 feet below the surface, as reported in 1914, to over 170 feet in 1940.

The non-pumping water levels of sands penetrated at depths of 1,100 feet to 2,100 feet in the area at Baton Rouge, shown by well EB-32 at the Gulf States Utilities power plant, have recently begun to decline. The water level of well EB-32 declined from 35.7 feet above the measuring point on March 12, 1940, to 14.9 feet above the measuring point on November 23, 1940. The decline is chiefly a result of the increase in withdrawals from the sands caused by the drilling of new deep wells. The water is too warm to be used for cooling purposes.

#### SOUTHWESTERN LOUISIANA

Monthly water-level measurements were made in 1940 in seven wells in Jefferson Davis Parish, eight wells in Acadia Parish, three wells in Allen Parish, and three wells in Evangeline Parish. Automatic water-stage recorders were operated on four wells. Observations are not usually made on the wells during the summer months because during these months most of the wells are pumped for rice irrigation. Four new observation wells were established in Calcasieu Parish, one of which, situated near Lake Charles, was equipped with a water-stage recorder. A total of 388 individual measurements of water level were made in the observation wells in south-western Louisians in 1940.

The major fluctuations of water level in wells in the rice area are caused by pumping for the irrigation of rice. The fluctuations are characterized by steep declines during the summer months when the pumpage is heavy and gentle rises during the fall, winter and spring months when the pumpage is light. The water levels in all the wells equipped with water-level recorders fluctuate in response to changes in atmospheric pressure. Graphs produced by water-stage recorders on two of the wells

showed fluctuations of water level on May 18 that correspond with the time of the earthquake in Imperial Valley, California. The maximum fluctuation recorded was 0.19 foot.

Increased precipitation during the growing season of 1940 provided a supply of water for the rice fields that was greater than usual. As a result the pumpage from wells was reduced and the lowest water levels recorded for the year were on the average about 9 feet above the lowest levels of 1939. At the close of 1940, the water levels were still approximately 3.5 feet above the levels at the close of 1939. The fluctuations of water level in the rice area are illustrated by a comparison of average monthly water levels in well JD-23 given in the following table.

Average monthly water levels, in feet below measuring point,

Month	Wate: 1939	r level 1940	_Net change in	Month	Wate: 1939	r level 1940	Net change in
			water level				water level
Jan.	22.78	24.36	-1.58	July	34.16	26.42	+7.74
Feb.	21.76	23.35	-1.59	Aug.	33.38	26.48	+6.90
Mar.	20.97	22.33	-1.36	Sept.	32.53	27.43	+5.10
Apr.	20.96	21.61	-0.65	Oct.	29.14	25.41	+3.73
May	23.95	21.73	+2.22	Nov.	27.40	23.73	+3.67
June	30.61	25.58	+5.03	Dec.	25.70	22.16	+3.67
				Annual averag	26.84	24.22	+2.62

in well JD-23 in 1939 and 1940

## Acadia Parish

Ac-5. Mrs. W. S. Bruner. NW2 sec. 15, T. 8 S., R. 2 E. Water level, in feet below measuring point, 1940: Apr. 4, 1:10 p.m., 46.36; Sept. 23, 42.27; Oct. 4, 2:00 p.m., 50.95; Nov. 1, 3:35 p.m., 49.84.

Ac-7. Lozen Leger, NE2 sec. 9, T. 10 S., R. 2 E.
Weten level in feet below measuring point 1946

	water level,	in reet be	low measuring	ng point, 1940	
Date	Hour	Water level	Date	Hour	Water level
Apr. 3 Aug. 23 30	2:00 p.m. 9:35 a.m. 2:45 p.m.	30.09 37.50 42.73	Sept. 23 Oct. 4 Nov. 1	1:30 p.m. 3:00 p.m.	34.90 33.67 32.22

Ac-19. Measurements discontinued.

Ac-22. Harry Frey. Sec. 19, T. 7 S., R. 1 E.
Water level in feet below measuring point. 1940

	""" "			pomine, role	
		Water			Water
Date	Hour	level	Date	Hour	level
Apr. 6	11:45 a.m.	42.80 55.95	Oct. 4 Nov. 1	2:35 p.m. 4:25 p.m.	49.45 46.46
Aug. 30 Sept.24	4:00 p.m.	51.52	Dec. 6	3:35 p.m.	42.86

#### Acadia Parish -- Continued.

Ac-32. Measurements discontinued.

Ac-34. Dr. F. N. Hayes,  $SW_4^1$  sec. 10, T. 7 S., R. 2 W. Water level, in feet below measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level	
Apr. 8 Aug. 23 30 Sept.24	2:45 p.m. 11:55 a.m. 5:25 p.m.	45.25 51.05 55.15 52.39	Sept.27 Oct. 25 Nov. 26	6:00 p.m. 5:40 p.m. 4:55 p.m.	51.65 49.07 46.88	

Ac-35. Onezime Doucet. NW1 sec. 22, T. 8 S., R. 2 W. Water level, in feet below measuring point, 1940

Apr. 8	3:20 p.m.	38,06	Oct. 25	5:10 p.m.	42.23
Sept.24 27	5:30 p.m.	45.51 44.86	Nov. 26	4:30 p.m.	39.77

Ac-40. H. A. Kerr. NE $^1_4$  sec. 1, T. 9 S., R. 1 W. Equipped with water-stage recorder.

		Water	level,	in feet	pelom	mea	suring	point	, 1940		
Jan.	5	9:00	a.m.	31.78	Jı	ıly	5	9:00	a.m.		37.42
	12	9:10		31,44		•	12	1:15	p.m.	;	36.27
	19	10:00		31.31	- 1		19		a.m.	;	35.36
	26	9:00	a.m.	31.06			26	8:10	a.m.		38.4 <u>7</u>
Feb.	2	9:30	a.m.	30.86	A	ıg.	2	7:50	a.m.		38.98
	9	9:00		30.41			16	10:25		;	34.70
	16	8:50		30.26	1		23	11:00	a.m.		39.90
	23	9:35	a.m.	30.06			30	4:30	p.m.		42.84
Mar.	1	9:00	a.m.	29.79	S	ept.	6	11:45	a.m.		43.35
	8	9:05	a.m.	29.66			13	11:00	a.m.		42.19
	15	9:00	a.m.	29.48	1		20	9:05	a.m.		40.66
	22	10:00	a.m.	29.32	- 1		27	4:40	p.m.		36.36
	29	9:00	a.m.	29.13	0	ct.	4	3:05	p.m.	;	35.10
Apr.	5	9:15	a.m.	28.94	- 1		11	10:50	a.m.		34.21
	12	8:40		28.85			18	1:10	p.m.	;	33.54
	19	9:30		28.65	1		25	4:25	p.m.		33.02
	26	9:10		29.25	N	ov.	1	4:25	p.m.		32.42
May	3	9 <b>:4</b> 5	a.m.	29.78	- 1		8	10:25	a.m.		31.95
	10	9:20	a.m.	34.65	1		15	12:45	p.m.		32.20
	17	9:00	a.m.	40.64	1		21	10:30	a.m.	3	30.95
	24	9:05		45.61			28	3:25	p.m.	;	30.54
	31		a.m.	46.39	De	ec.	5	4:03	p.m.	:	30.19
June	7	8:20		47.62			12	12:10	p.m.	:	29.77
	15	7:30		42.25	1		19		p.m.		29.34
	21	9:00		41.62	-		26	4:00	p.m.	:	28.83
	28	9:00	a.m.	39.24	1						

Ac-56. Henry Bieber. NW sec. 36, T. 7 S., R. 1 E.
Water level in feet below measuring point. 1940

		,		 5 F,	
Apr. 6 Aug. 23 30	10:50 a.m. 10:20 a.m. 3:35 p.m.	48.30 56.98 63.36	Nov. Dec.	4:10 p.m. 3:15 p.m.	51.73 49.52

Ac-104. Measurements discontinued.

Ac-139. Measurements discontinued.

Ac-145. Measurements discontinued.

Ac-147. Measurements discontinued.

Ac-152. Measurements discontinued.

#### Acadia Parish -- Continued.

Ac-175. Leon Lapleau. North line sec. 46, T. 10 S., R. 2 W. Drilled irrigation well, diameter 12 inches, depth 320 feet. Measuring point, bottom edge of inclined discharge pipe. Tape distance along discharge pipe from measuring point to level of bench mark, 12.25 feet. Bench mark on pump base, level with land surface, 10.02 feet above mean sea level.

Water level, in feet below measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level
Apr. 3 Aug. 30 Sept.23 27	4:30 p.m. 2:10 p.m. 4:00 p.m.	20.79 25.33 26.29 25.71	Oct. 25 Nov. 26 Dec. 26	3:45 p.m. 3:25 p.m. 3:30 p.m.	24.14 22.09 20.64

Ac-179. Dr. F. N. Hayes. NW sec. 34, T. 8 S., R. 1 W.
Weter level in feet below measuring point 1940

	Marel Tever,	TH TAGE DE	TOM MESSALTINE	point,	1940	
Apr. 8 Sept.24 27	11.15 a.m.	38.03 46.24 45.45	0ct. 25 Nov. 26	4:45 4:07		42.20 39.77

#### Allen Parish

Al-1. R. R. McClelland.  $SE_2^1$  sec. 35, T. 6 S., R. 3 W. Equipped with water-stage recorder.

		Water level,	in feet b	elow measuring	point, 1940	
Jan.	5	10:00 a.m.	48.90	June 21	10:00 a.m.	48.20
	12	10:22 a.m.	48.38	28	10:10 a.m.	38.37
	19	11:30 a.m.	48.87	July 5	10:00 a.m.	45.64
	26	10:00 a.m.	48.63	19	9:25 a.m.	43.74
Feb.	2	11:00 a.m.	48.44	26	9:25 a.m.	48.05
	9	10:20 a.m.	46.74	Aug. 16	9:30 a.m.	40.09
	16	10:00 a.m.	48.06	23	12:20 p.m.	49.24
	23	11:10 a.m.	48.16	30	5:50 p.m.	49.46
Mar.	1	10:00 a.m.	47.82	Sept. 6	10:45 a.m.	48.70
	8	10:10 a.m.	47.76	13	9:45 a.m.	40.82
	15	10:00 a.m.	47.97	20	10:35 a.m.	48.78
	22	11:00 a.m.	47.56	27	10:45 a.m.	48.56
	29	10:00 a.m.	47.03	Oct. 4	4:10 p.m.	48.58
Aug.	5	10:30 a.m.	47.41	11	3:30 p.m.	48.49
_	12	9:45 a.m.	46.34	18	12:00 noon	48.44
	19	10:45 a.m.	46.77	25	10:20 a.m.	48.21
	26	10:25 a.m.	47.08	Nov. 1	11:05 a.m.	47.91
May	3	10:15 a.m.	46.82	8	3:25 p.m.	48.06
•	10	10:20 a.m.	46.70	15	11:30 a.m.	47.75
	17	10:15 a.m.	46.99	21	2:30 p.m.	46.14
	24	10:20 a.m.	47.12	28	10:10 a.m.	32.23
	31	10:00 a.m.	48.56	Dec. 5	9:05 a.m.	39.32
June	7	9:35 a.m.	49.13	12	10:45 a.m.	43.16
	15	9:00 a.m.	47.40	19	10:10 a.m.	45.73

Al-7. M. Carroll. NW1 sec. 36, T. 4 S., R. 4 W. Drilled irrigation well. Measuring point, bottom edge of inclined discharge pipe. Tape distance along discharge pipe from measuring point to land surface, 3.6 feet. Water levels, in feet below measuring point, 1940: Jan. 15, 50.96; Sept. 27, 9:05 a.m., 51.24; Oct. 25, 8:35 a.m., 50.83; Nov. 26, 8:37 a.m., 50.89.

LOUISIANA 31

#### Allen Parish -- Continued.

Al-16. Sam Fisher. SEt sec. 22, T. 5 S., R. 4 W. Drilled irrigation well. Measuring point, bottom edge of inclined discharge pipe. Tape distance along discharge pipe from measuring point to land surface, 5.6 feet.

Water	level.	in	feet	below	measuring	point.	1940
-------	--------	----	------	-------	-----------	--------	------

Date	Hour	Water level	Date	Hour	Water level
Jan. 16 Aug. 30 Sept.27	9:10 a.m. 9:30 a.m.	44.00 44.61 44.12	0ct. 25 Nov. 26	9:05 a.m. 9:10 a.m.	43.69 43.78

Al-17. Town of Kinder. Near south wall of water works building. Abandoned, drilled public supply well. Measuring point, elbow in casing, 4.69 feet above land surface.

	Water level,	in feet be	low measuring	point,	1940	
Jan. 16 Aug. 30	9:30 a.m.	38.39 37.53	Oct. 25 Nov. 26	9:35 9:40		38.26 37.38
Sept.27	10:00 a.m.	38.10	Dec. 26	9:15		35.95

Al-29. Calcasieu Sulphate Paper Co. Elizabeth, east of paper mill. Abandoned drilled industrial well, depth 160 feet. Measuring point, floor of recorder house, 2.65 feet above land surface. Equipped with water-stage recorder.

		Water level,	in feet b	elow measuring	point,	1940	
Feb.	20	2:40 p.m.	51.10	July 30	8:00	a.m. 51	.76
	27	8:15 a.m.	50.96	Aug. 6	8:00	a.m. 51	.62
Mar.	5	8:30 a.m.	51.36	13	8:00	a.m. 51	.54
	12	8:00 a.m.	51.32	20	8:00	a.m. 51	.74
	19	8:00 a.m.	51.33	27	8:00	a.m. 51	.62
	26	8:00 a.m.	51.36	Sept. 3	8:00	a.m. 51	.58
Apr.	2	8:00 a.m.	51.36	10	8:00	a.m. 51	.51
	9	8:00 a.m.	51.65	17	8:00	a.m. 51	.62
	16	8:00 a.m.	51.44	24	8:00	a.m. 51	.12
	23	8:00 a.m.	48.25	0ct. 1	8:00	a.m. 51	.52
	<b>3</b> 0	8:00 a.m.	50.52	8	8:00	a.m. 51	.30
May	7	9:00 a.m.	51.25	15	8:00	a.m. 51	.19
	14	9:00 a.m.	51.21	22	8:00	a.m. 51	.44
	21	8:00 a.m.	51.44	29	8:00	a.m. 51	.38
	28	8:00 a.m.	51.68	Nov. 5	8:00	a.m. 51	.26
June	4	8:00 a.m.	51.77	12	8:00	a.m. 51	.57
	11	8:00 a.m.	51.70	19	8:00	a.m. 51	.58
	18	8:00 a.m.	51.77	26	8:00	a.m. 51	.48
	25	9:00 a.m.	51.76	Dec. 3	8:00	a.m. 51	.69
July	2	8:00 a.m.	51.44	10	8:00	a.m. 51	.48
•	9	8:00 a.m.	51.58	17	8:00	a.m. 51	.69
	16	8:00 a.m.	51.53	24	5:30		.29
	23	8:00 a.m.	51,70	31	8:00		.53

# Avoyalles Parish

Av-7. Measurements discontinued. Well pulled.

Av-18. Haas Investment Company. Shirley Plantation, on parish line, sec. 28, T. 1 S., R. 2 E. Water level, in feet below measuring point, 1940: Mar. 27, 12.75.

#### Bienville Parish

Bi-2. Town of Gibsland. Gibsland, behind water plant. Abandoned drilled municipal well, diameter 8 inches, depth 500 (?) feet. Measuring point, top of 8-inch casing, 3.5 feet above land surface. Water levels, in feet below measuring point, 1940; Aug. 16, 49.25; Oct. 8, 51.75.

Bi-4. Community Public Service. Arcadia, 50 feet south of water plant. Drilled public supply well, diameter 6 inches, depth 585 feet. Measuring point, l-inch hole in 6-inch pipe, 4.5 feet above land surface. Water level, in feet below measuring point, 1940: Oct. 9, 154.05.

#### Calcasieu Parish

Cu-2. Town of Vinton. At ice plant, westernmost of three air-lift wells. Drilled public supply well, depth 422 feet. Measuring point, top of casing, 3.0 feet above land surface. Water levels, in feet below measuring point, 1940: June 20, 2.30; July 18, 10:20 a.m., 2.68.

Cu-4. Krause & Managan Lumber Co., Ltd. Town of Westlake on lake front approximately south-southeast of municipal water tower. Drilled industrial well, diameter 6 inches. Measuring point, top of 6-inch casing, 0.9 foot above land surface. Water level, in feet below measuring point, 1940: July 20, 6.35.

Cu-5. Jim Turner. SEt sec. 8, T. 8 S., R. 8 W. Drilled industrial well, diameter 6 inches, depth 430 feet. Measuring point, top of 6-inch casing, 1.7 feet above land surface. Water level, in feet below measuring point, 1940: Aug. 6, 9.96.

Cu-8. Krause & Managan Lumber Co., Ltd.  $SE_2^+$  sec. 15, T. 9 S., R. 9 W. Drilled industrial well, depth 500 feet. Measuring point, top of casing, 1.2 feet above land surface. Equipped with water-stage recorder.

water level. In leet below measuring boint, is	evel, in feet below measuring po	oint.	1940
--	----------------------------------	-------	------

Date	Hour	Water level	Date	Hour	Water level
Aug. 26	11:25 a.m. 11:30 a.m.	6.98 6.56	Nov. 1 8	12:35 p.m. 1:40 p.m.	5.96 5.80
Sept. 6 13	2:45 p.m. 1:50 p.m.	6.74 6.64	15 21	3:25 p.m. 12:45 p.m.	5.44 5.20
20	1:00 p.m.	6.66	28	12:15 p.m.	4.79
27 Oct. 4	12:55 p.m. 10:20 a.m.	6.43 6.57	Dec. 5	10:50 a.m. 3:05 p.m.	4.90 4.90
11	1:20 p.m.	6.55	19	11:30 a.m.	4.53
18 25	3:45 p.m. 12:45 p.m.	6.27 6.25	. 26	12:45 p.m.	4.20

#### East Baton Rouge Parish

EB-15. Standard Oil Company of Louisiana. Baton Rouge refinery, southeast of tank 67. Abandoned drilled industrial well, diameter 12 inches, depth 686 feet. Measuring point, top concrete base, 1.4 feet above land surface. Equipped with water-stage recorder.

	Water level,	in feet	below measuring	point,	1940	
July 20	12:05 p.m.	163.24	Oct. 25	10:00	a.m.	156.29
22	1:40 p.m.	162.05	Nov. 1	9:53	a.m.	155.14
Aug. 23	3:30 p.m.	174.53	8	9:35	a.m.	153.89
30	10:30 a.m.	173.84	15	9:25	a.m.	152.07
Sept. 6	3:00 p.m.	174.16	22	10:00	a.m.	148.38
13	9:45 a.m.	172.94	29	9:30	a.m.	149.96
20	2:20 p.m.	172.02	Dec. 6	9:30	a.m.	148.26
27	10:20 a.m.	172.47	12	9:55	a.m.	145,55
Oct. 4	10:05 a.m.	167.08	20	9:23	a.m.	148.04
11	9:45 a.m.	159.98	27	9:50	a.m.	143.33
18	10:35 a.m.	157.82				

#### East Baton Rouge Parish -- Continued.

EB-22. Standard Oil Company of Louisiana. Baton Rouge refinery, southwest of tank 784. Abandoned drilled industrial well, diameter 12 inches, depth 701 feet. Measuring point, top of 12-inch casing, 0.5 foot above land surface. Equipped with water-stage recorder.

Water level, in feet below measuring point, 1	1940	. 194	point.	measuring	below	feet	in	level.	Water
---	------	-------	--------	-----------	-------	------	----	--------	-------

Date Hour		Water level	Date	Hour	Water level
Sept.11 13 20 27 Oct. 4 11 18 25 Nov. 1	10:00 a.m. 10:30 a.m. 2:00 p.m. 10:00 a.m. 9:30 a.m. 9:05 a.m. 10:10 a.m. 9:25 a.m.	178.43 176.69 177.40 177.55 168.42 162.22 158.22 156.26 154.44	Nov. 8 15 22 29 Dec. 6 13 20 27	9:15 a.m. 9:04 a.m. 9:40 a.m. 9:05 a.m. 9:00 a.m. 9:30 a.m. 9:30 a.m.	153.08 151.50 144.86 150.06 148.12 150.63 145.94 140.59

EB-39. Standard Oil Company of Louisiana. Baton Rouge refinery, southeast corner along Bayou Sara road. Abandoned drilled industrial well, diameter 8 inches, depth 1,575 feet, screens at 1,150 and 1,575 feet. Measuring point, gage on 3/4-inch elbow, 0.5 foot above land surface. Water level, in feet above measuring point, 1940: Aug. 30, 2:30 p.m., 12.0.

EB-45. Standard 0il Company of Louisiana. Baton Rouge refinery, east well on dock approach. Abandoned drilled industrial well, diameter 10 inches, depth 665 feet. Measuring point, top of 10-inch casing, about 15 feet above stream bed.

	Water level,	in feet b	elow measuring	point,	1940	
Oct. 4 25 Nov. 1 8 15 22	1:30 p.m. 10:35 a.m. 11:40 a.m. 10:35 a.m. 11:00 a.m. 10:30 a.m.	148.12 137.15 135.78 134.82 133.38 129.21	Nov. 29 Dec. 6 13 20 23	10:05 10:30 10:35 10:05 11:15	a.m. a.m.	130.58 130.20 126.65 127.08 122.00

EB-53. Standard 0il Company. Baton Rouge refinery, west well on dock approach. Abandoned drilled industrial well, diameter 10 inches, depth 414 feet. Measuring point, top of 10-inch casing, about 15 feet above stream bed.

	Water level,	in feet be	elow measuring	point, 1940	
0ct. 4 18	1:45 p.m. 10:50 a.m.	137.72 125.25	Nov. 22 29	10:40 a.m. 10:15 a.m.	119.91 119.52
25 Nov. 1 8 15	10:35 a.m. 11:55 a.m. 10:40 a.m. 10:50 a.m.	125.20 123.77 122.99 121.23	Dec. 6 20 27	10:40 a.m. 10:20 a.m. 11:30 a.m.	118.07 117.93 114.58

EB-74. Solvay Process Company. Baton Rouge, at gate of plant. Abandoned drilled industrial well, diameter 12 inches, depth 440 feet. Measuring point, top of 12-inch casing, 0.5 foot above land surface. Equipped with water-stage recorder.

	Water level,	in feet be	low measuring	point, 1940	
Sept.10 13 20 27 Oct. 4 11 18 25	3:00 p.m. 11:20 a.m. 1:20 p.m. 9:55 a.m. 9:00 a.m. 8:40 a.m. 9:40 a.m. 8:45 a.m.	162.86 163.15 163.26 163.58 163.72 161.23 157.88 155.37	Nov. 1 8 15 22 29 Dec. 6 20	8:50 a.m. 8:50 a.m. 8:55 a.m. 9:15 a.m. 8:37 a.m. 8:40 a.m. 8:30 a.m.	152.96 151.35 149.49 147.72 146.65 146.86 144.32 142.08

#### East Baton Rouge Parish -- Continued.

EB-82. Gulf States Utilities. Baton Rouge, power plant. Drilled industrial well, diameter 8 inches, depth 2,056 feet. Measuring point, 1-inch gage hole, 4 feet above land surface. Water levels, in feet above measuring point, 1940: Mar. 12, 35.7; Sept. 5, 16.5; Nov. 23, 14.9.

EB-125. Peoples Ice and Fuel Company. Baton Rouge, 1031 Railroad Avenue, at side door. Abandoned drilled industrial well, diameter 8 inches, depth 744 feet. Measuring point, top concrete base, 0.2 foot above land surface. Water levels, in feet below measuring point, 1940: Aug. 13, 116.87; Sept. 17, 113.49; Nov. 3, 113.62.

EB-128. Ice Service, Inc. Baton Rouge, 135 South 15th Street. Abandoned drilled industrial well, diameter 8 inches, depth 412 feet. Measuring point, top of 8-inch casing, 1.0 foot above land surface. Equipped with water-stage recorder.

Water level, in feet below measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level
Oct. 3 12 18 25 Nov. 1	1:30 p.m. 10:00 a.m. 8:45 a.m. 8:00 a.m. 8:00 a.m.	92.50 93.44 92.55 91.33 90.43 89.89	Nov. 15 22 27 Dec. 6 20 27	8:05 a.m. 8:30 a.m. 7:55 a.m. 8:04 a.m. 7:40 a.m. 11:30 a.m.	89.10 88.23 87.27 86.49 84.81 84.13

EB-175. Santa Maria Dairy. Sec. 54, T. 8 S., R. 2 E., Kleinpeter. Abandoned drilled domestic well, diameter 2 inches, depth 675 feet. Measuring point, top of 2-inch casing, 0.4 foot above land surface. Water level, in feet below measuring point, 1940: July 10, 15.24.

### East Carroll Parish

Ec-3. Town of Lake Providence. Lake Providence, at rear of water plant. Abandoned drilled public supply well, diameter 8 inches, depth 470 feet. Measuring point, top of air line, 4.1 feet above land surface. Water levels, in feet below measuring point, 1940: Oct. 18, 66.01; Oct. 25, 67.50; Nov. 8, 65.30; Nov. 28, 52.90.

#### East Feliciana Parish

Ef-1. Town of Clinton. Clinton, below water tank, southwest of concrete reservoir. Drilled municipal well, diameter 8 inches, depth 160 feet. Measuring point, 2-inch hole in discharge pipe, 2.8 feet above land surface. Water level, in feet below measuring point, 1940: June 10, 11.12.

## Evangeline Parish

Ev-1. John LaHaye.  $SW_4$  sec. 20, T. 4 S., R. 1 E. Water levels, in feet below measuring point, 1940: Sept. 25, 45.18; Nov. 8, 53439; Dec. 6, 4:45 p.m., 52.12.

Ev-2. Dorestant Ardoin. North line sec. 37, T. 6 S., R. 1 W. Water levels, in feet below measuring point, 1940; Sept. 25, 56.58; Nov. 8, 8:55 a.m., 44.51; Dec. 6, 5:05 p.m., 44.03.

## Evangeline Parish -- Continued.

Ev-4. Rock Island Ry. SW2 sec. 31, T. 1 S., R. 1 E. Drilled industrial well, depth 600 feet. Measuring point, top of concrete foundation, 1.2 feet above surface.

Water level, in feet below measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level
Jan. 18 Aug. 20 Sept.25	10:55 a.m.	37.49 22.15 16.08	Nov. 8 Dec. 6	5;30 p.m.	29.75 23.88

#### Grant Parish

G-2. Carnahan, Hunthunce, and Hargiss. Sec. 5, T. 5 N., R. 3 W.

		Wate:	r level,	in feet	þ	elow measuring	point,	1940	
Jan.	11	9:40	a.m.	3,82		July 9	10:55	a.m.	1.79
	25	1:45	p.m.	3.89		23	11:27	a.m.	3.95
Feb.	7	12:40		3,86		Aug. 6	11:15	a.m.	3.74
	22	10:05	a.m.	3.51		20	9:55	a.m.	5.22
Mar.	7	10:20	a.m.	3.93		Sept. 4	10:15	a.m.	5.65
	20	10:45	a.m.	3.72		17	9:55	a.m.	6.55
Apr.	3	10:20	a.m.	4.47		0ct. 2	9:45	a.m.	6.93
_	17	10:00	a.m.	1.97		16	1:35	p.m.	7.37
May	1	10:00	a.m.	2.58		30	10:05	a.m.	7.57
-	15	9:55	a.m.	3.20		Nov. 13	10:00	a.m.	7.24
	28	9:40	a.m.	2.56		26	10:55	a.m.	7.29
June	12	10:00	a.m.	3.22		Dec. 10	10:45	a.m.	4.59
	25	1:35	p.m.	2.89		22	3:25	p.m.	4.31

G-9. City of Colfax. Pumping station.

			Water leve	l, in feet	below measuring	point,	1940	
Jan.	11	•	10:00 a.m.	31.35	June 12	10:25	a.m.	27.74
	19		2:00 p.m.	31.53	. 26	9:20	a.m.	27.01
Feb.	7		1:20 p.m.	31.44	July 10	8:45	a.m.	26.08
	22		10:35 a.m.	30.76	29	10:30	a.m.	26.30
Mar.	7		10:50 a.m.	30.58	Aug. 7	9:55	a.m.	25.92
	20		11:15 a.m.	30.78	21	9:45	a.m.	26.00
Apr.	1 <del>3</del>		10:50 a.m.	31.07	Sept. 4	10:40	a.m.	26.46
	17		10:30 a.m.	29.72	17	10:25	a.m.	26.98
May	1		10:30 a.m.	29.27	17	10:30	a.m.	26.76
-	15		10:40 a.m.	28.75	17	11:00	a.m.	46.14
	28		10:00 a.m.	28.34	Oct. 2	10:15	a.m.	27.50

## G-11. City of Colfax. Behind pumping station.

Water level, in feet below measuring point, 1940 10:10 a.m. 23.54 10 8:55 a.m. Jan. 11 29.10 July 2:35 p.m. 1:30 p.m. 10:25 a.m. 25 24 10:40 a.m. 23.81 31.55 Feb. 29.16 10:05 a.m. 23.49 Aug. 21 22 28.46 9:55 a.m. 23.67 Mar. 7 10:40 a.m. 28.30 Sept. 4 10:50 a.m. 24.13 10:40 a.m. 20 11:05 a.m. 17 24.72 28.53 11:00 a.m. 10:40 a.m. 10:25 a.m. 25.30 28.83 Oct. Apr. 2 17 16 27.32 2:10 p.m. 28.13 i 10:40 a.m. 26.73 30 10:40 a.m. 26.48 May 10:45 a.m. 10:10 a.m. 13 26.52 15 26.28 Nov. 10:25 a.m. 26 27.22 28 25.86 11:55 a.m. June 12 10:35 a.m. 25,28 10 11:10 a.m. 23.74 9:30 a.m. 3:45 p.m. 24.69 26 24.54 22

G-19. W. C. Maxwell. Sec. 28, T. 7 N., R. 2 W. Water levels, in feet below measuring point, 1940: May 15, 12:25 p.m., 13.09; Nov. 26, 1:15 p.m., 15.36.

### Grant Parish -- Continued.

G-21. United States Department of Agriculture. Catahoula Fire Tower, Pollock.

Water level, in feet below measuring point, 1940 Water Water Date Hour Date Hour level level 12:25 p.m. 12:30 p.m. 137.55 1:00 p.m. 11:55 a.m. 138,58 Feb. 22 July 29 7 138,54 138.11 Aug. Mar. 20 1:00 p.m. 21 138.10 139.11 12:25 p.m. 12:45 p.m. 12:40 p.m. 12:48 p.m. 12:20 p.m. Apr. 3 138.38 Sept. 139.07 17 Oct. 137.62 138,54 4:00 p.m. 1:00 p.m. 1:50 p.m. 1:00 p.m. 1:15 p.m. 16 138.59 Kay 1 137.87 1:10 p.m. 12:15 p.m. 12:15 p.m. 15 137.72 30 137.54 28 137.71 136.90 Nov. 26 138.50 June 12 138.18 Dec. 10 July 10 10:40 a.m. 136.88 22 2:40 p.m. 138.07

G-27. 4-H Club Camp. SELSWLSWL sec. 4, T. 6 N., R. 1 E., Fishville. Water level, in feet above measuring point, 1940: May 29, 10:00 a.m., 2.19.

G-30. Rock Hill School. On Highway 71. Water levels, in feet below measuring point, 1940: May 15, 10:20 a.m., 22.30; Nov. 26, 11:30 a.m., 23.54.

G-38. Grant Utilities Company. Montgomery, northwest well behind power plant.

		Water level,	in feet b	elow measuring	point,	1940	
Jan.	11	10:40 a.m.	17.47	July 10	9:25	a.m.	17.78
	19	12:30 p.m.	17.82	24	11:10	a.m.	19.83
	25	3:30 p.m.	18.10	Aug. 7	10:40	a.m.	19.43
Feb.	7	2:00 p.m.	20.21	21	10:35	a.m.	19.84
	22	11:05 a.m.	20.07	Sept. 4	11:18	a.m.	19.95
Mar.	7	11:15 a.m.	17.39	17	11:35	a.m.	19.98
	20	11:45 a.m.	16.87	Oct. 2	10:55	a.m.	20.12
Apr.	3	11:35 a.m.	17.13	16	2:45	p.m.	20.14
	17	11:10 a.m.	16.49	30	11:25	a.m.	20.05
May	1	11:20 a.m.	16.05	Nov. 13	11:00		20.01
-	15	11:20 a.m.	16.01	26	12:40		17.37
	28	10:45 a.m.	17.21	Dec. 10	11:45		16.86
June	12	11:05 a.m.	19.01	22	4:20	p.m.	18.32
	26	9:55 a.m.	18.53	1			

#### G-41. Measurements discontinued.

G-44. Louisiana and Arkansas Railway Company. NW1 sec. 8, T. 6 N., R. 1 W. Bentley, 30 feet east of railroad tracks. Plugged Nov. 16, 1940.

	mater level,	in reet	perow measuring	point, 1	940
11	11:35 a.m.	38.13	May 28	11:55 a	.m. 38.49
26	12:50 p.m.	38.36	June 12	12:00 n	100n 38.28
7	3:05 p.m.	38.30	26	10:50 a	.m38.39
22	12:10 p.m.	38.73	July 10	10:25 a	.m. 38.29
7	12:15 p.m.	38.33	29	12:45 p	o.m. 38.20
20	12:40 p.m.	38.45	Aug. 7	11:40 s	.m. 38.13
3	12:35 p.m.	38.53	21	12:05 p	o.m. 38.14
17	12:25 p.m.	38.37	Sept. 4	12:35 p	.m. 38.07
1	1:00 p.m.	38.55	17	12:35 p	.m. 38.07
15	12:55 p.m.	38.53	0ct. 2	12:05 p	.m. 38.10
	26 7 22 7 20 3 17	11 11:35 a.m. 26 12:50 p.m. 7 3:05 p.m. 22 12:10 p.m. 7 12:15 p.m. 20 12:40 p.m. 3 12:35 p.m. 17 12:25 p.m. 1 1:00 p.m.	11 11:35 a.m. 38.13 26 12:50 p.m. 38.36 7 3:05 p.m. 38.30 22 12:10 p.m. 38.73 7 12:15 p.m. 38.33 20 12:40 p.m. 38.45 3 12:35 p.m. 38.53 17 12:25 p.m. 38.53 1 1:00 p.m. 38.55	11 11:35 a.m. 38.13 May 28 26 12:50 p.m. 38.36 June 12 7 3:05 p.m. 38.30 26 22 12:10 p.m. 38.73 July 10 7 12:15 p.m. 38.33 29 20 12:40 p.m. 38.45 Aug. 7 3 12:35 p.m. 38.53 21 17 12:25 p.m. 38.55 21 1 1:00 p.m. 38.55 17	26

LOUISIANA 37

## Grant Parish -- Continued.

G-61. Oakgrove Church. NW sec. 11, T. 6 N., R. 2 W.
Water level, in feet below measuring point, 1940

Date		Hour	Water level	Date	Hour	Water level
Jan.	11 26	11:20 a.m. 12:15 p.m.	39.36 39.33	July 10 24	11:30 a.m. 12:30 p.m.	37.85 37.63
Feb.	7	2:50 p.m.	39.18	Aug. 7	11:25 a.m.	37.53
	22	11:55 a.m.	38.88	21	11:50 a.m.	37.64
Mar.	7	12:00 noon	38.83	Sept. 4	12:20 p.m.	37.84
	20	12:30 p.m.	38.89	17	12:20 p.m.	38.08
Apr.	3	12:20 p.m.	38.98	Oct. 2	11:50 a.m.	38.25
-	17	12:10 p.m.	38.58	16	3:30 p.m.	38.46
Мау	1	12:45 p.m.	37.98	30	12:30 p.m.	38.67
•	15	12:40 p.m.	37.80	Nov. 13	11:55 a.m.	38.52
	28	11:40 a.m.	37.74	26	1:30 p.m.	38.10
June	12	11:45 a.m.	38.08	Dec. 10	12:40 p.m.	38.03
	26	10:35 a.m.	37.94	22	2:10 p.m.	37.62

#### Jefferson Davis Parish

JD-1. Measurements discontinued.

JD-5. Measurements discontinued.

JD-6. Latrielle Estate. NW sec. 22, T. 8 S., R. 4 W.

	Mater Tever,	in leet be	erom messarring	point, 1940	
Apr. 10	10:00 a.m.	42.48	Oct. 25	11:30 a.m.	46.20
Sept.19		50.36	Nov. 26	10:59 a.m.	44.06
27	11:30 a.m.	48.79	Dec. 26	10:55 a.m.	42.13

JD-7. Measurements discontinued.

JD-8. Measurements discontinued.

JD-9. Calcasieu-Marine National Bank. NW $\frac{1}{4}$  sec. 34, T. 9 S., R. 4 W. Equipped with water-stage recorder.

		Water level,	in feet b	elow measuring	point,	1940	
Jan.	5	1:40 p.m.	26.70	July 5	2:10	p.m.	39.23
	12	1:35 p.m.	26.35	12	11:00	a.m.	43.33
	19	2:45 p.m.	26.17	19	11:00	a.m.	36.56
	26	1:00 p.m.	25.89	26	12:10	p.m.	36.48
Feb.	2	3:15 p.m.	25.66	Aug. 2	10:10	a.m.	38.79
	9	12:00 noon	25.17	12	8:20	a.m.	33.40
	16	12:25 p.m.	24.88	16	8:00	a.m.	32.20
	23	12:45 p.m.	24.69	23	4:10	p.m.	35.5 <b>5</b>
Mar.	1	1:30 p.m.	24.37	30	1:00	p.m.	41.19
	8	2:00 p.m.	24.20	Sept. 6	12:45	p.m.	38.37
	15	11:40 a.m.	24.06	13	12:05	p.m.	35.05
	22	2:30 p.m.	23.81	20	2:15	p.m.	32.93
	29	3:00 p.m.	23.55	27	2:55	p.m.	31.20
Apr.	5	2:10 p.m.	23.46	Oct. 4	12:25		30,05
	12	2:25 p.m.	23.39	11	11:45	a.m.	29.15
	19	2:55 p.m.	23.31	18	2:15	p.m.	28.45
	26	2:15 p.m.	24.77	25	2:25	p.m.	27.90
May	3	12:00 noon	23.70	Nov. 1		p.m.	27.22
•	10	2:30 p.m.	24.52	8	11:45	a.m.	26.67
	17	2:10 p.m.	28.26	15	2:05	p.m.	27.98
	24	12:00 noon	32.19	21	11:25	a.m.	25.56
	31	3:00 p.m.	33,80	28	2:10	p.m.	25.15
June	7	12:10 p.m.	36.78	Dec. 5	1:15	p.m.	24.72
	15	3:00 p.m.	33.49	12		p.m.	24.27
	21	3:25 p.m.	31.16	19		p.m.	23.88
	28	11:50 a.m.	34.93	26	2:15		23.24

JD-10. Measurements discontinued.

## Jefferson Davis Parish -- Continued.

JD-11. Mrs. T. L. Linscomb.  $NE_4^1$  sec. 28, T. 7 S., R. 3 W. Water level, in feet below measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level	
Apr. 1 Aug. 30 Sept.19 27	8:40 a.m. 6:10 p.m. 11:10 a.m.	46.32 52.12 51.77 50.86	0ct. 25 Nov. 26 Dec. 26	11:00 a.m. 10:40 a.m. 10:25 a.m.	49.05 47.54 45.79	

- JD-12. Measurements discontinued.
  - JD-13. Measurements discontinued.
  - JD-14. Measurements discontinued.
  - JD-15. Measurements discontinued.
  - JD-17. Measurements discontinued.
  - JD-18. Measurements discontinued.
  - JD-19. Measurements discontinued.
  - JD-20. Measurements discontinued.
  - JD-21. Measurements discontinued.

JD-23. Calcasieu-Marine National Bank. NE $\frac{1}{4}$  sec. 4, T. 10 S., R. 6 W. Equipped with water-stage recorder.

		Water level,	in feet be	low measuring	point,	1940	
Jan.	5	1:10 p.m.	24.79	July 5	1:30	p.m.	26.66
	12	1:00 p.m.	24.47	12	10:00		26.40
	19	2:15 p.m.	24.25	19	10:30	a.m.	26.35
	26	12:30 p.m.	24.01	26	11:40	a.m.	26.26
Feb.	2	3:00 p.m.	23.80	Aug. 2	10:40	a.m.	26.36
	9	11:20 a.m.	23.43	12	9:15	a.m.	26.35
	16	12:00 noon	23.19	16	8:25	a.m.	26.17
	23	12:15 p.m.	22.96	23	3:35	p.m.	26.00
Mar.	1 8	1:00 p.m.	22.70	30	11:45		27.54
		1:40 p.m.	22.54	Sept. 6	1:40	p.m.	28.07
	15	ll:10 a.m.	22,40	13	12:50	p.m.	27.80
	18	2:45 p.m.	22.30	20	1:30	p.m.	27.31
	22	2:00 p.m.	22.21	27	2:15	p.m.	26.52
	29	2:15 p.m.	21.78	Oct. 4	11:15	a.m.	26.03
Apr.	5	1:30 p.m.	21.84	11	12:25	p.m.	25.57
	12	1:30 p.m.	21.74	18	2:50	p.m.	25.19
	19	2:15 p.m.	21.46	25	1:45	p.m.	24.85
	26	1:40 p.m.	21.40	Nov. 1	1:35	p.m.	24.45
May	3	11:15 a.m.	21.16	8			24.14
•	10	2:00 p.m.	21.09	15	2:40	p.m.	23.67
	17	1:35 p.m.	21.08	21	12:00		23.35
	24	11:15 a.m.	21.69	28	1:20	p.m.	23.05
	31	2:35 p.m.	23.63	Dec. 5	12:10	p.m.	22.73
June	7	11:35 a.m.	24.40	12	2:10	p.m.	22.35
	15	2:30 p.m.	25.72	19	12:20	p.m.	22.02
	21	2:50 p.m.	25.64	26		p.m.	21.53
	28	11:15 a.m.	26.57				

JD-26. I. L. Hebert. NEt sec. 21, T. 10 S., R. 3 W.
Water level. in feet below measuring point. 1940

			TON MOGDOTTINE	PO 2 0		
Apr. 2	5:45 p.m.	24.92	Oct. 25	2:50	p.m.	28,18
Aug. 30	1:20 p.m.	30.86	Nov. 26	2:30	p.m.	26.10
Sept.27	3:15 p.m.	29.12	Dec. 26	2:38	p.m.	24.52

LOUISIANA 39

#### Jefferson Davis Parish -- Continued.

- JD-32. Measurements discontinued.
- JD-41. Measurements discontinued.

JD-42. Fritz Miller.  $SE_4^1$  sec. 24, T. 8 S., R. 5 W. Drilled irrigation well. Measuring point, bottom edge of inclined discharge pipe. Tape distance along discharge pipe from measuring point to level of bench mark, 5.3 feet. Bench mark at land surface, 38.18 feet above mean sea level.

Water level, in feet below measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level
Aug. 23	1:40 p.m.	49.90	Oct. 25	11.40 a.m.	44.95
Sept.19		49.37	Nov. 26	ll:11 a.m.	42.90
27	11:50 a.m.	48.65	Dec. 26	11:15 a.m.	40.65

JD-43. C. Leger. NEt sec. 24, T. 8 S., R. 6 W.

	Marer Tever,	in leet t	erow measuring	point,	1940	
Apr. 1	. 3:35 p.m.	31.66	0et. 25	11:50		34.03
Sept.19		34.64	Nov. 26	11:25	a.m.	32.42
27	12:00 noon	35.78	Dec. 26	11:40	a.m.	30.29

- JD-50. Measurements discontinued.
- JD-63. Measurements discontinued.
- JD-65. Dewitt Smith.  $SW_{4}^{1}$  sec. 3, T. 11 S., R. 3 W.

Water level, in feet below measuring point, 1940

Apr. 2 5:15 p.m. 17.38 Oct. 25 3:05 p.m.

Apr. 2	5:15 p.m.	17.38	0et. 25	3:05 p.m.	19.96
Sept.20		21.37	Nov. 26	2:47 p.m.	18.20
27	3:30 p.m.	20.78	Dec. 26	3:00 p.m.	17.09

JD-115. Calcasieu-Marine National Bank. NRt sec. 34, T. 9 S., R. 5 W.

	Water level,	in feet b	elow measuring	point,	1940	
Apr. 1		32.79	0et. 25	2:10		37.23
Aug. 30 Sept.19		56.39 43.49	Nov. 26 Dec. 26	1:57 2:03		34.58 32.49
27	2:45 p.m.	41.06	D00. 20	2.00	p.m.	. 05.40

# LaSalle Parish

La-18. Good Pine Lumber Company. NE1 sec. 9, T. 8 N., R. 3 E. Good Pine, under derrick on pond behind boiler room.

		Water level,	in feet	below measuring	point, 1940	
Jan.	11	12:50 p.m.	34.65	July 10	12:00 noon	34.39
	26	2:50 p.m.	34.78	24	2:20 p.m.	34.27
Feb.	7	4:25 p.m.	34.74	Aug. 7	1:50 p.m.	34.22
	22	1:50 p.m.	34.98	21	1:55 p.m.	34.38
Mar.	7	2:00 p.m.	34.92	Sept. 4	2:05 p.m.	34.13
	20	2:35 p.m.	34.60	17	2:25 p.m.	34.15
Apr.	3	2:05 p.m.	34.63	Oct. 2	2:05 p.m.	34.17
	17	2:10 p.m.	34.68	16	5:20 p.m.	34.21
May	1	2:25 p.m.	34.56	30	2:25 p.m.	34.23
	16	2:35 p.m.	34.61	Nov. 13	1:55 p.m.	34.28
	29	11:10 a.m.	34.45	26	3:05 p.m.	34.32
June	12	1:25 p.m.	34.43	Dec. 18	2:25 p.m.	34.19
	26	12:15 p.m.	34.25	22	3:55 p.m.	33.91

#### LaSalle Parish -- Continued.

La-41. Louisiana Delta Hardwood Lumber Company.  $NE_2^1$  sec. 8, T. 8 N., R. 3 E. Trout, at west road entrance to mill.

		Water level, in feet below measuring point, 1940						
Date		Hour	Water level	Date	Hour	Water level		
Jan.		12:20 p.m.	29.37	July 10	11:30 a.m.	29.37		
	26	2:10 p.m.	29 <b>.6</b> 6	24	1:50 p.m.	29.10		
Feb.	7	3:50 p.m.	29.70	Aug. 7	1:20 p.m.	29.09		
	22	1:15 p.m.	29.73	21	1:20 p.m.	29.23		
Mar.	7	1:25 p.m.	29.78	Sept. 4	1:30 p.m.	29.41		
	20	2:00 p.m.	29.37	17	1:55 p.m.	29.77		
Apr.	3	1:30 p.m.	26.38	Oct. 2	1:30 p.m.	29.72		
	17	1:35 p.m.	26.09	16	4:45 p.m.	29.93		
Мау	-i	1:55 p.m.	29.58	30	1:55 p.m.	29.83		
243	16	2:05 p.m.	29.62	Nov. 13	1:15 p.m.	29.98		
	29	10:40 a.m.	29.57	26	2:35 p.m.	30.06		
T	12							
June		12:50 p.m.	29.55	Dec. 10	1:55 p.m.	29.79		
	26	11:40 a.m.	29.37	22	3:20 p.m.	29.28		

La-42. Louisiana Delta Hardwood Lumber Company.  $NE_4^{\frac{1}{4}}$  see. 8, T. 8 N., R. 3 E., Trout, under derrick at lumber shed.

		Water level,	in feet	be	low measuring	point,	1940	
Jan.	11	12:30 p.m.	33.86		July 10	11:40	a.m.	34.08
	26	2:20 p.m.	34.93		24	2:00	p.m.	<b>33.</b> 90
Feb.	7	4:00 p.m.	34,49		Aug. 7	1:30	p.m.	33.94
	22	1:25 p.m.	34.37		21	1:30		34.09
Mar.	7	1:35 p.m.	34.29		Sept. 4	1:40	p.m.	34.27
	20	2:10 p.m.	34.05		17	2:05	p.m.	34.51
Apr.	3	1:40 p.m.	31.38		Oct. 2	1:40	p.m.	34.45
•	17	1:45 p.m.	31.17		16	4:45	p.m.	34.82
Мау	1	2:05 p.m.	34.15		30	2:05	p.m.	34.69
•	16	2:35 p.m.	34.21		Nov. 13		p.m.	34.82
	29	10:50 a.m.	34,20		26	2:45	p.m.	34.87
June	12	1:00 p.m.	34.24		Dec. 10		p.m.	34.67
	26	11:50 a.m.	34.02		22		p.m.	34.08

#### Livingston Parish

- Li-4. Garyville Lumber Company. Livingston, northeast well at abandoned shop site. Abandoned jetted industrial well, diameter 3 inches. Measuring point, top of concrete pipe at land surface. Water level, in feet above measuring point, 1940: May 24, 0.92.
- Li-10. McCarroll Lumber Company. Frost, north side of mill pond. Abandoned jetted industrial well, diameter 2 inches, depth 350 (?) feet. Méasuring point, top of la inch plug, 1.7 feet above land surface. Water levels, in feet above measuring point, 1940; May 24, 1.0; July 15, 2.21; Oct. 16, 2.0.
- Li-11. Sharp CCC Camp. Springville. Abandoned domestic well, diameter 2 inches, depth 600 (?) feet. Measuring point, top of tee, 1.1 feet above land surface. Water levels, in feet above measuring point, 1940: May 28, 2.8; July 15, 3.35.
- Li-16. J. F. McCarroll. Holden, 200 feet west of residence. Drilled domestic well, diameter 4 inches, depth 1,750 feet. Measuring point, 3/4 inch outlet in pipe to field at land surface. Pressure, in pounds per square inch, 1940: June 7, 59.

## Morehouse Parish

Mo-1. Town of Bastrop. Bastrop, city park. Abandoned public supply well, diameter 16 inches, depth 655 (?) feet. Measuring point, steel base plate at land surface. Water-stage recorder installed Nov. 22, 1940. Water levels, in feet below measuring point, 1940: Nov. 14, 74.30; Nov. 22, 74.14; Nov. 23, 73.54.

LOUISIANA 41

9:45 a.m.

6:15 p.m.

193.00

154.00

### Rapides Parish

1. City of Alexandria. St. Ann St. and levee.

23

Mar.

9:45 a.m.

9:30 a.m.

Water level, in feet below measuring point, 1940 Water Water Date , Hour Date Hour level level 155.89 9:50 a.m. Jan. 5 150.25 Mar. 8 10:15 a.m. 15 11:45 a.m. 12 10:05 a.m. 149.88 156.15 10:05 a.m. 9:35 a.m. 22 157.60 19 150.29 154.95 Feb. 158.32 10:00 a.m. 2 9:40 a.m. 29 9 10:35 a.m. 156.67 5 9:55 a.m. 156.09 Apr. 11:30 a.m. 16 11:20 a.m. 156.23 26 150.00

May

3

13

3. City of Alexandria. Fourth and Monroe Sts. Casing pulled July 2, 1940.

156.12

156.06

	Water level,	in feet	below measuring	point,	1940	
5	9:50 a.m.	61.73	Apr. 5	9:40	a.m.	59.88
12	9:50 a.m.	61.66	12	9:35	a.m.	58.83
19	9:25 a.m.	60.79	19	2:10	p.m.	58.88
26	10:30 a.m.	60.99	26	11:20	a.m.	57.18
2	9:25 a.m.	60.79	May 3	9:30	a.m.	58.98
9	10:20 a.m.	60.18	9	9:40	a.m.	58.90
16	ll:ll a.m.	59.99	16	9:40	a.m.	59.29
23	9:30 a.m.	59.86	23	9:15	a.m.	59.77
1	12:20 p.m.	60.19	30	9:45	a.m.	59.24
8	10:00 a.m.	60.11	June 6	9:45	a.m.	59.49
15	11:35 a.m.	59.89	13	9:30	a.m.	59.95
22	9:50 a.m.	59.76	20	8:55	a.m.	59.38
29	9:45 a.m.	59.98	27			59.67
	12 19 26 2 9 16 23 1 8 15 22	5 9:50 a.m. 12 9:50 a.m. 19 9:25 a.m. 26 10:30 a.m. 2 9:25 a.m. 9 10:20 a.m. 16 11:11 a.m. 23 9:30 a.m. 1 12:20 p.m. 8 10:00 a.m. 15 11:35 a.m. 22 9:50 a.m.	5 9:50 a.m. 61.73 12 9:50 a.m. 61.66 19 9:25 a.m. 60.79 26 10:30 a.m. 60.99 2 9:25 a.m. 60.79 9 10:20 a.m. 60.18 16 11:11 a.m. 59.99 23 9:50 a.m. 59.36 1 12:20 p.m. 60.19 8 10:00 a.m. 60.11 15 11:35 a.m. 59.88 22 9:50 a.m. 59.86	5 9:50 a.m. 61.73 Apr. 5 12 9:50 a.m. 61.66 12 19 9:25 a.m. 60.79 19 26 10:30 a.m. 60.99 26 2 9:25 a.m. 60.79 May 3 9 10:20 a.m. 60.18 9 16 11:11 a.m. 59.99 16 23 9:30 a.m. 59.86 23 1 12:20 p.m. 60.19 30 8 10:00 a.m. 60.11 June 6 15 11:35 a.m. 59.89 13 22 9:50 a.m. 59.76 20	5 9:50 a.m. 61.73 Apr. 5 9:40 12 9:50 a.m. 61.66 12 9:35 19 9:25 a.m. 60.79 19 2:10 26 10:30 a.m. 60.99 26 11:20 2 9:25 a.m. 60.79 May 3 9:30 9 10:20 a.m. 60.18 9 9:40 16 11:11 a.m. 59.99 16 9:40 23 9:30 a.m. 59.86 23 9:15 1 12:20 p.m. 60.19 30 9:45 8 10:00 a.m. 60.11 June 6 9:45 15 11:35 a.m. 59.89 13 9:30 22 9:50 a.m. 59.76 20 8:55	12     9:50 a.m.     61.66     12     9:35 a.m.       19     9:25 a.m.     60.79     19     2:10 p.m.       26     10:30 a.m.     60.99     26     11:20 a.m.       2     9:25 a.m.     60.79     May     3     9:30 a.m.       9     10:20 a.m.     60.18     9     9:40 a.m.       16     11:11 a.m.     59.99     16     9:40 a.m.       23     9:30 a.m.     59.86     23     9:15 a.m.       1     12:20 p.m.     60.19     30     9:45 a.m.       8     10:00 a.m.     60.11     June     6     9:45 a.m.       15     11:35 a.m.     59.89     13     9:30 a.m.       22     9:50 a.m.     59.76     20     8:55 a.m.

4. City of Alexandria. Fourth and Monroe Sts. Equipped with water-stage recorder.

		Water level,	in feet	below measuring	point, 1940	
Jan.	5	9:25 a.m.	19.10	July 4	8:05 a.m.	11.15
	12	9:40 a.m.	18.98	11	9:35 a.m.	-9.50
	19	9:15 a.m.	19.15	18	8:35 a.m.	9.04
	25	10:20 a.m.	19.18	1 25	10:30 a.m.	10.29
Feb.	2	9:15 a.m.	19.25	Aug. 1	11:15 a.m.	10.80
	9	10:05 a.m.	18.26	1 8	11:35 a.m.	10.66
	16	11:05 a.m.	18.29	15	ll:40 a.m.	10.53
	23	9:20 a.m.	18.00	22	9:07 a.m.	12.24
Mar.	1	12:10 p.m.	17.92	29	9:10 a.m.	12.90
	8	9:50 a.m.	18.08	Sept. 5	9:20 a.m.	13.60
	15	11:25 a.m.	18.23	12	11:00 a.m.	14.24
	22	9:40 a.m.	18.28	19	9:20 a.m.	14.76
	29	9:35 a.m.	18.40	26	9:50 a.m.	14.70
Apr.	5	9:30 a.m.	18.28	Oct. 3	9:00 a.m.	15.27
	11	9:25 a.m.	17.59	10	8:50 a.m.	15.60
	19	2:00 p.m.	16.38	17	9:20 a.m.	15.96
	26	11:10 a.m.	16,51	24	8:50 a.m.	16.31
May	3	9:20 a.m.	15.39	31	8:45 a.m.	16.60
	9	9:30 a.m.	15.25	Nov. 7	8:45 a.m.	16.55
	16	9:30 a.m.	15.37	14	9:50 a.m.	16.12
	23	9:05 a.m.	15,23	1 20	11:10 a.m.	16.41
	30	9:35 a.m.	14.63	27	11:56 a.m.	14.63
June	6	9:35 a.m.	13.55	Dec. 4	10:20 a.m.	13.72
	13	9:20 a.m.	12.95	11	11:00 a.m.	13.49
	20	8:45 a.m.	11.50	17	10:20 a.m.	11.02
	27	8:45 a.m.	10.98	25	9:45 a.m.	8.83
		···				

<sup>7.</sup> City of Alexandria. Fifth and Monroe Sts. Water level, in feet below measuring point, 1940: Nov. 1, 137.00.

### Rapides Parish -- Continued.

- City of Alexandria. NE corner Fourth and Oak Sts., across Bayou Rapides. Water level, in feet below measuring point, 1940: May 14, 135.00.
  - 12. No measurements made in 1940.

20. City of Alexandria. SW corner of old swimming pool in City Park. Water-stage recorder removed May 22, 1940.

	Water level,	in feet	bel	ow measurin	g point, 1940	
	Hour	Water level		Date	Hour	Water level
-5	8:45 a.m.	72.17	T	July 11	12:30 p.m.	120.00
			- 1			121.00
			- 1			121.00
			- 1			121.00
			i			122.00
9	9:30 a.m.	81.56	- 1	15	11:00 a.m.	124.00
16	10:35 a.m.	82.44		22	11:25 a.m.	129.00
23	8:45 a.m.	83.12	- 1	29	12:45 p.m.	131.00
1	8:50 a.m.	77.10	- 1	Sept. 5		133.00
8	9:05 a.m.	82.05	1	12	10:15 a.m.	134.00
15	10:50 a.m.	85.48	- 1	26	10:55 a.m.	136,00
22	9:00 a.m.	86.94	- 1	Oct. 3	10:00 a.m.	137.00
29		88.04		10	1:05 p.m.	139.00
5		89.01	ı	17	10:20 a.m.	140.00
12		88.68	- 1	31	10:15 a.m.	141.50
17		88.48	- 1	Nov. 7		139.00
22				14	11:10 a.m.	139.00
			- {	20		142.00
						143.00
						143.00
			- 1			144.00
				20	,·· w·m,	
	12 19 25 2 9 16 23 1 8 15 22 29 5 12	Hour  5 8:45 a.m. 12 9:00 a.m. 19 8:45 a.m. 25 9:30 a.m. 2 8:40 a.m. 9 9:30 a.m. 16 10:35 a.m. 23 8:45 a.m. 1 8:50 a.m. 25 9:05 a.m. 29 9:00 a.m. 29 9:00 a.m. 29 9:00 a.m. 20 9:00 a.m. 21 8:45 a.m. 22 10:30 a.m. 22 10:30 a.m. 23 9:00 a.m. 24 11:30 a.m. 27 11:32 a.m. 27 11:32 a.m.	Hour Water level  5 8:45 a.m. 72.17 12 9:00 a.m. 72.68 19 8:45 a.m. 73.46 25 9:30 a.m. 78.47 9 9:30 a.m. 81.56 16 10:35 a.m. 82.44 23 8:45 a.m. 83.12 1 8:50 a.m. 87.10 8 9:05 a.m. 82.05 15 10:50 a.m. 85.48 22 9:00 a.m. 86.94 29 9:00 a.m. 86.94 29 9:00 a.m. 88.04 5 8:50 a.m. 89.01 12 8:45 a.m. 89.01 12 8:45 a.m. 89.01 12 8:45 a.m. 89.30 30 9:00 a.m. 88.68 17 3:00 p.m. 88.48 22 10:50 a.m. 89.30 30 9:00 a.m. 93.88 20 11:30 a.m. 101.00 27 11:32 a.m. 199.00	Hour Vater level  5 8:45 a.m. 72.17 12 9:00 a.m. 72.68 19 8:45 a.m. 73.46 25 9:30 a.m. 78.47 9 9:30 a.m. 81.56 16 10:35 a.m. 82.44 25 8:45 a.m. 83.12 1 8:50 a.m. 87.10 8 9:05 a.m. 82.05 15 10:50 a.m. 82.05 15 10:50 a.m. 86.94 29 9:00 a.m. 86.94 29 9:00 a.m. 88.04 5 8:50 a.m. 89.01 12 8:45 a.m. 89.01 12 8:45 a.m. 89.01 12 8:45 a.m. 89.30 30 9:00 a.m. 89.30 30 9:00 a.m. 93.88 20 11:30 a.m. 101.00 27 11:32 a.m. 199.00 27 11:32 a.m. 199.00	Hour   Water level   Date	Hour

21. City of Alexandria. Fourth and St. James Sts.

Water level, in feet below measuring point, 1940 10:18 a.m. Jan. 5 10:05 a.m. 65.89 4 82.93 July 11 12 10:20 a.m. 65.76 10:00 a.m. 83.31 9:50 a.m. 83.73 19 9:50 a.m. 65.59 18 26 10:50 a.m. 65.88 25 9:40 a.m. 84.60 66.55 12:30 p.m. 10:00 a.m. 84.29 Feb. 2 9:55 a.m. 1 Aug. 9 10:50 a.m. 67.34 8 83.52 16 11:30 a.m. 68.86 15 10:00 a.m. 84.05 23 10:06 a.m. 69.99 22 10:30 a.m. 85.10 10:25 a.m. 9:40 a.m. 69.86 85.45 Mar. 1 29 5 10:30 a.m. 10:20 a.m. 9:35 a.m. 8 70.37 Sept. 86.58 15 12:00 noon 71.70 12 86.99 22 10:15 a.m. 73.16 19 10:30 a.m. 87.59 29 10:15 a.m. 73.28 26 11:45 a.m. 10:55 a.m. 86.78 Apr. 5 10:10 a.m. 75.25 oct. .3 87.62 12 10:00 a.m. 75.53 10 12:00 noon 88.44 19 2:25 p.m. 9:20 a.m. 9:15 a.m. 89.09 76.00 17 26 89.39 12:55 p.m. 76.92 24 May 3 11:15 a.m. 77.23 31 9:15 a.m. 88.95 9 9:55 a.m. 77.56 7 9:05 a.m. 89.84 Nov. 16 10:00 a.m. 77.99 10:10 a.m. 14 90.30 1:35 p.m. 10:15 a.m. 23 9:45 a.m. 77.96 20 90.69 30 10:00 a.m. 77.53 27 89.68 10:00 a.m. 79.34 June 6 Dec. 10:40 a.m. 90.28 13 11 9:45 a.m. 80.23 12:15 p.m. 90.94 20 10:15 a.m. 81.26 17 11:25 a.m. 90.98 27 10:45 a.m. 82.02 25 10:05 a.m. 91.10

<sup>22.</sup> J. N. Balls. Alexandria, Kent Park at Texas Ave. Water level, in feet below measuring point, 1940: Mar. 28, 24.57.

LOUISIANA 43

## Rapides Parish -- Continued.

26. Missouri Pacific R. R. Alexandria, abandoned roundhouse on N. 13th St. Equipped with water-stage recorder.

Water level, in feet below measuring point, 1940

				TOM MORDALTINE	pozzio, zozo	
Date		Hour	Water level	Date	Hour	Water level
Jan.	5	9:05 a.m.	99.18	July 4	8:30 a.m.	97.32
	12	9:20 a.m.	99,83	11	9:20 a.m.	96.70
	19	9:00 a.m.	100,65	18	10:15 a.m.	97.73
	26	9:55 a.m.	103.09	25	10:10 a.m.	96.68
Feb.	2	9:00 a.m.	103.61	Aug. 1	10:55 a.m.	97.93
	9	9:50 a.m.	102.08	8	11:55 a.m.	98.25
	16	10:50 a.m.	101.80	15	11:20 a.m.	97.94
	23	9:05 a.m.	101.67	22	8:50 a.m.	98.24
Mar.	1	12:35 p.m.	102.52	29	8:55 a.m.	98.38
	8	9:25 a.m.	102.75	Sept. 5	9:00 a.m.	98.19
	15	11:10 a.m.	101.97	12	10:45 a.m.	98.13
	22	9:20 a.m.	102,27	. 19	9:00 a.m.	97.07
	29	9:20 a.m.	102.31	26	10:35 a.m.	96.06
Apr.	5	9:10 a.m.	102.02	Oct. 3	9:20 a.m.	94.72
	12	9:05 a.m.	101.64	10	8:30 a.m.	93.70
	19	1:45 p.m.	99,89	17	8:35 a.m.	92.91
	26	10:50 a.m.	100.89	24	8:20 a.m.	92.57
May	3	9:00 a.m.	99.95	31	8:20 a.m.	93.05
•	9	8:45 a.m.	100.15	Nov. 7	8:25 a.m.	91.76
	16	9:10 a.m.	100.93	14	9:30 a.m.	92.97
	23	8:45 a.m.	100.97	20	11:35 a.m.	93.22
	30	9:15 a.m.	100.15	27	9:50 a.m.	93.33
June	6	9:15 a.m.	98.54	Dec. 4	10:00 a.m.	93.40
	13	9:00 a.m.	98.58	11	10:40 a.m.	94.56
	20	9:15 a.m.	97.39	17	10:00 a.m.	94.37
	27	9:15 a.m.	97.35	25	9:20 a.m.	94.99

- 28. Rock Island R. R. Shop on Maple St., Alexandria. Water levels, in feet below measuring point, 1940: Jan. 3, 11:45 a.m., 0.82; Mar. 22, 11:10 a.m., 0.86.
- 30. Bailey Gaunce Refinery. Alexandria, Ninth St. near Maple St. Water level, in feet below measuring point, 1940: Mar. 22, 12.89.
- 34. Louisiana and Arkansas Railway. Abandoned roundhouse. Abandoned drilled industrial well, diameter 6 inches, depth 1,100 feet. Measuring point, top casing, 2.65 feet above land surface.

		Water level,	in feet	be	low measuring	point,	1940	
Mar.	25		162.00		Aug. 22	10:45	a.m.	103.78
	27		147.88		29	10:25	a.m.	101.08
	28		132.90		Sept. 5	10:50	a.m.	101.88
	29		123.91		12	10:05	a.m.	101.34
May	9	10:05 a.m.	109.75		19	10:50	a.m.	102.21
•	16	10:15 a.m.	109.86		26	11:10	a.m.	102.48
	23	11:20 a.m.	109.73		0ct. 3	10:20	a.m.	103.17
	30	11:20 a.m.	109.81		10	12:25	p.m.	103.79
June		10:20 a.m.	108,53		17	10:00	a.m.	103.57
•	13	10:20 a.m.	108.73		24	10:00	a.m.	103.17
	20	10:55 a.m.	108.66		31	9:55	a.m.	102.82
	27	11:00 a.m.	106.80		Nov. 7	9:45	a.m.	102.54
July	4	10:50 a.m.	108.69		14	10:50	a.m.	102.63
	11	10:20 a.m.	108.58		20	12:55	p.m.	102.69
	18	10:05 a.m.	108.75		27	10:50	a.m.	101.75
	25	9:20 a.m.	104.48		Dec. 4	11:18	a.m.	101.45
Aug.	1	1:00 p.m.	104.58		11	11:45	a.m.	101.20
_	8	10:20 a.m.	104.80		17	11:55	a.m.	101.68
	15	10:40 a.m.	102.98		25	10:25	a.m.	100.60

## Rapides Parish -- Continued.

35. Pine Products Company. Alexandria. Equipped with water-stage recorder.

Water level, in feet below measuring point, 1940

Date		Hour	Water level	Date	Hour	Water level	
Jan.	5	10:25 a.m.	104.33	July 11	10:40 a.m.	108.63	
	12	10:40 a.m.	104.74	18	10:20 a.m.	108.87	
	19	10:05 a.m.	105.41	25	9:00 a.m.	109.06	
	25	10:30 a.m.	105.29	Aug. 1	12:45 p.m.	109.45	
Feb.	2	10:25 a.m.	105.34	8	10:35 a.m.	109.82	
	9	11:20 a.m.	105.80 -	15	10:20 a.m.	109.60	
	16	10:20 a.m.	105.98	22	11:00 a.m.	110.02	
	23	10:25 a.m.	106.31	29	10:05 a.m.	110.61	
Mar.	1	10:30 a.m.	106.64	Sept. 5	10:35 a.m.	111.24	
	8	ll:10 a.m.	106.91	12	9:45 a.m.	112.10	
	15	12:20 p.m.	107.29	19	11:05 a.m.	112.82	
	22	11:25 a.m.	107.69	26	10:25 a.m.	113.14	
	26	9:20 a.m.	107.83	0ct. 3	10:40 a.m.	112.63	
Apr.	19	10:30 a.m.	105.82	10	1:40 p.m.	111.58	
	26	1:20 p.m.	106.25	17	9:45 a.m.	111.60	
May	3	11:30 a.m.	105.97	24	9:40 a.m.	109.96	
	9	10:00 a.m.	106.20	31	9:40 a.m.	110.29	
	16	10:30 a.m.	106.67	Nov. 7	9:30 a.m.	109.54	
	23	11:35 a.m.	107.19	14	10:30 a.m.	109.55	
	30	11:05 a.m.	107.54	20	1:15 p.m.	110.06	
June	6	10:40 a.m.	107.20	27	10:35 a.m.	109.58	
	13	10:40 a.m.	107.89	Dec. 4	11:00 a.m.	109.06	
	20	10:30 a.m.	107.55	11	11:55 a.m.	108.42	
	27	11:20 a.m.	107.90	17	11:40 a.m.	109.35	
July	4	10:35 a.m.	108.41	25	10:45 a.m.	110.36	

- 43A. Missouri Pacific R.R. Alexandria. Water level, in feet below measuring point, 1940: Apr. 12, 122.23.
- 45. Louisiana Ice and Electric Company. Ice dock, 3 miles southeast of Alexandria on Highway 71. Water level, in feet below measuring point, 1940: Apr. 12, 84.73.
- 67. Louisiana Ice and Electric Company. Lecompte. Water level, in feet below measuring point, 1940: Dec. 19, 64.62.
- 77. J. C. McNutt, SW. corner, sec. 19, T. 1 N., R. 2 E. Cheneyville. Water level, in feet below measuring point, 1940: Mar. 27, 15.93.
- 78. Percy Hoyt. SW corner, sec. 20, T. 1 N., R. 2 E. Cheneyville. Water level, in feet below measuring point, 1940: Mar. 27, 15.69.
- 85. H. K. Bubenzer. Five miles southeast of Cheneyville on Highway 71. Water level, in feet below measuring point, 1940: Mar. 27, 18.83.
- 89. State Colony Farm. SE corner, sec. 39, T. 4 N., R. 2 W. Water level, in feet below measuring point, 1940: Apr. 3, 2.21.
- 90. J. A. Brown. SW corner, sec. 73, T. 4 N., R. 2 W. Water level, in feet below measuring point, 1940: Apr. 3, 15.01.
- 133. Texas and Pacific R. R. 200 feet southeast of old water tank, Boyce. Casing pulled Dec. 1940. Water level, in feet below measuring point, 1940: Mar. 20, 5.92.

LOUISIANA 45

## Rapides Parish -- Continued.

135. Arbuthnot mill site. Sec. 61, T. 5 N., R. 3 W.
Water level, in feet above measuring point, 1940

Date		Hour	Water level	Date	Hour	Water level
Jan.	11	9:30 a.m.	8.1	July 9	10:40 a.m.	8.1
	25	1:25 p.m.	7.7	23	11:15 a.m.	7.3
Feb.	7	12:20 p.m.	8.1	Aug. 6	10:55 a.m.	7.4
	22	9:45 a.m.	8.1	20	9:40 a.m.	7.5
Mar.	7	9:10 a.m.	7.5	Sept. 4	10:05 a.m.	7.0
	20	10:30 a.m.	7.5	17	9:40 a.m.	6.9
Apr.	3	10:00 a.m.	7.8	Oct. 2	9:30 a.m.	6.9
•	17	9:40 a.m.	7.9	16	1:20 p.m.	6.9
May	1	9:40 a.m.	7.8	30	9:45 a.m.	6.9
	28	9:25 a.m.	8.7	Nov. 12	9:45 a.m.	6.1
June	12	9:30 a.m.	8.6	26	10:40 a.m.	6.1
	25	11:20 a.m.	8.6	Dec. 22	3:10 p.m.	7.5

138. Texas and Pacific R. R. Quarry station, sec. 1, T. 5 N., R. 4 W. Measurements discontinued July 23, 1940.

	Wat	er level,	in feet abo	ve measuring	point, 1940	
Jan. 1	.1 8:	45 a.m.	1.07	May 1	8:55 a.m.	2.10
2	25 12:	20 p.m.	1.01	15	9:00 a.m.	1.09
Feb.	7 11:	35 a.m.	1.03	28	8:45 a.m.	1.16
2	2 9:	00 a.m.	1.07	June 12	8:40 a.m.	1.17
Mar.	7 9:	10 a.m.	1.14	25	10:30 a.m.	1.34
2	9:	30 a.m.	1.05	July 9	10:00 a.m.	1.35
Apr. ~		10 a.m.	1.14	23	10:35 a.m.	1.22
_ 1	17 9:	00 a.m.	1.19			

139. H. Dearborn. Quarry station, sec. 1, T. 5 N., R. 4 W.

	Water	level,	in feet be	low measuring	point, 194	0
11	8:55	a.m.	17.43	July 9	10:10 a.	m. 15.31
25	12:30	p.m.	17.53	23	10:45 a.:	m. 15.02
7	11:45	a.m.	17.59	Aug. 6	10:20 a.:	m. 15.02
22	9:10	a.m.	16.47	20	9:10 a.:	m. 15.09
7	9:20	a.m.	16.15	Sept. 4	9:30 a.:	m. 15.45
20	9:40	a.m.	16.25	17	9:05 a.:	m. 15.84
3	9:20	a.m.	15.89	Oct. 2	8:55 a.	m. 16.15
17	9:10	a.m.	15.86	16	12:40 p.:	m. 16.43
1	9:05	a.m.	15.42	30	9:05 a.	m. 16.84
15	9:10	a.m.	15.72	Nov. 12	9:10 a.:	m. 16.89
28	8:35	a.m.	15.82	26	9:10 a.:	m. 15.72
18	8:50	a.m.	15.86	Dec. 10	10:15 a.	m. 15.78
25	10:40	a.m.	15.66	22	2:35 p.	m. 15.32
	25 7 22 7 20 3 17 1 15 28 18	11 8:55 25 12:30 7 11:45 22 9:10 7 9:20 20 9:40 3 9:20 17 9:10 1 9:05 15 9:10 28 8:35 18 8:50	11 8:55 a.m. 25 12:30 p.m. 7 11:45 a.m. 22 9:10 a.m. 20 9:40 a.m. 3 9:20 a.m. 17 9:10 a.m. 1 9:05 a.m. 15 9:10 a.m. 28 8:35 a.m. 18 8:50 a.m.	11 8:55 a.m. 17.43 25 12:30 p.m. 17.53 7 11:45 a.m. 17.59 22 9:10 a.m. 16.47 7 9:20 a.m. 16.15 20 9:40 a.m. 16.25 3 9:20 a.m. 15.89 17 9:10 a.m. 15.86 1 9:05 a.m. 15.42 15 9:10 a.m. 15.72 28 8:35 a.m. 15.82 18 8:50 a.m. 15.86	11 8:55 a.m. 17.43 July 9 25 12:30 p.m. 17.53 23 7 11:45 a.m. 17.59 Aug. 6 22 9:10 a.m. 16.47 20 7 9:20 a.m. 16.15 Sept. 4 20 9:40 a.m. 16.25 17 3 9:20 a.m. 15.89 Oct. 2 17 9:10 a.m. 15.86 16 1 9:05 a.m. 15.42 30 15 9:10 a.m. 15.72 Nov. 12 28 8:35 a.m. 15.82 26 18 8:50 a.m. 15.86 Dec. 10	11     8;55 a.m.     17.43     July 9     10:10 a.       25     12:30 p.m.     17.53     23     10:45 a.       7     11:45 a.m.     17.59     Aug. 6     10:20 a.       22     9:10 a.m.     16.47     20     9:10 a.       7     9:20 a.m.     16.15     Sept. 4     9:30 a.       20     9:40 a.m.     16.25     17     9:05 a.       3     9:20 a.m.     15.89     Oct. 2     8:55 a.       17     9:10 a.m.     15.36     16     12:40 p.       1     9:05 a.m.     15.42     30     9:05 a.       15     9:10 a.m.     15.72     Nov. 12     9:10 a.       28     8:35 a.m.     15.82     26     9:10 a.       18     8:50 a.m.     15.86     Dec. 10     10:15 a.

150. Grady Kelly. Sec. 82, T. 4 N., R. 1 W. Water level, in feet below measuring point, 1940: Apr. 3, 15.09.

183. O.T. Oden. Eight miles south of Alexandria on Highway 165. Water level, in feet below measuring point, 1940: Mar. 22, 27.92.

184. O. T. Oden. Eight miles south of Alexandria on Highway 165. Water level, in feet below measuring point, 1940: Mar. 22, 26.93.

188. J. H. Wise. Woodworth.

		Water	level,	in feet abo	ve meas	uring	point, 19 <b>4</b> 0	
Jan.	11	3:30	p.m.	7.45	May	15	4:55 p.m.	7.63
	25		p.m.	7.32		28	5:00 p.m.	7.55
Feb.	8	2:20		7.59	June	12	3:20 p.m.	7.48
	22	4:40		7.63		27	5:15 p.m.	7.54
Mar.	7	3:45	p.m.	7.42	July	10	1:45 p.m.	7.26
	22	12:45		6.47	4	24	4:30 p.m.	7.24
Apr.	5	4:45		7.51	Aug.	9	9:45 a.m.	7.45
	19	3:50		7.58	0-	21	4:40 p.m.	6.61
May	3	12:45		7.49	Sept	. 6	4:55 p.m.	5.18

#### Rapides Parish -- Continued.

188. -- Continued.

Water level, in feet above measuring point, 1940

Date	Hour	Water level	Date	Hour	Water level	
Sept.18 Oct. 7 21 Nov. 6	12:00 noon 2:45 p.m. 4:15 p.m. 2:30 p.m.	6.91 7.03 6.96 6.96	Nov. 26 Dec. 16 31	3:30 p.m. 1:20 p.m. 3:30 p.m.	7.05 2.51 1.80	

201. Louisiana Ice and Electric Company. Pineville, in street behind power plant.

		Water	level,	in feet be	low measur	ng point,	1940	
Jan.	5	11:20	a.m.	139.35	July 4	10:00	a.m.	139.23
	12	11:20	a.m.	140.37	1	11:40	a.m.	138.37
	19	10:35	a.m.	140.27	18	9:35	a.m.	139.59
	26	4:30	p.m.	145.37	2	11:15	a.m.	140.53
Feb.	2	11:15	a.m.	155.81	Aug.	10:10	a.m.	140.72
	9	12:20	p.m.	154.01	- 8	10:55	a.m.	141.09
	16	12:25		152.99	1	1:25	p.m.	140.08
	23	11:40	a.m.	152.20	22		a.m.	138.85
Mar.	1	11:55	a.m.	154.91	29	10:40	a.m.	139.77
	8	12:10	p.m.	154.64	Sept.	11:35	a.m.	140.35
	15	10:30		152.68	12		a.m.	140.95
	22	11:00	a.m.	156.38	19	10:10	a.m.	140.28
	29	12:00	noon	154.29	26	8:15	a.m.	139.14
Apr.	5	11:55	a.m.	154.02	Oct. 3	11:15	a.m.	138.55
-	12	11:25	a.m.	152.53	10	11:45	a.m.	138.24
	19	2:50	p.m.	150.76	1 1'	7 10:40	a.m.	137.07
	26		a.m.	149.48	24	10:35	a.m.	137.39
May	3	11:00	a.m.	151.35	3:	10:40	a.m.	137.32
•	9	11:00	a.m.	145.88	Nov.	7 10:40	a.m.	137.91
	16	12:30	p.m.	152.05	1	11:30	a.m.	137.99
	23	11:05	a.m.	141.06	20	10:15	a.m.	138.75
	30	10:45		138.38	2'	7 11:22	a.m.	139.54
June	6	11:40	a.m.	139.84	Dec.	1:20	p.m.	140.75
	13	11:30		139.47	1	L 2:55	p.m.	141.99
	20	9:55		139.29	1'			140.72
	27	10:30	a.m.	139.35	2	12:55	p.m.	142.76

203. Measurements discontinued.

207. State Hospital for Insane. Pineville. Water level, in feet below measuring point, 1940: Apr. 5, 68.48.

208. State Hospital for Insane. Pineville. Water level, in feet below measuring point, 1940: Apr. 5, 146.95.

209. Veterans Hospital. Pineville.

		Water	level,	in feet belo	w measuring	point, 1940	
Jan.	18	7:30	a.m.	165.00	Feb. 14	12:00 noon	188,00
	18	9:30	a.m.	186.00	14	2:00 p.m.	189.00
	30	3:30	p.m.	190.00	14	4:00 p.m.	190.00
Feb.	14	8:00	a.m.	165.00	Sept.16	8:00 a.m.	174.00
	14	10:00	a.m.	187.00	16	11:00 a.m.	198.00

212. Measurements discontinued.

218. Camp Beauregard. About 5 miles north of Pineville on Highway 165. Equipped with water-stage recorder.

	Water	level, in	feet below	measuring	point, 1940	
Jan. 5	10:55	a.m.	78.03	Feb. 9	11:55 a.m.	78.08
12	11:05	a.m.	77.97	12	5:00 p.m.	78.04
19	10:20	a.m.	78.10	16	11:45 a.m.	78.00
25	4:00	p.m.	78.13	23	11:10 a.m.	78.05
Feb. 2	10:55	a.m.	78.23	Mar. 1	11:35 a.m.	78.02

LOUISIANA

47

### Rapides Parish -- Continued.

218.--Continued.
Water level, in feet below measuring point, 1940

Date		Hour	Water level	Date	Hour	Water level
Mar.	8	11:40 a.m.	78.03	Aug. 8	11:20 a.m.	80.10
	15	10:00 a.m.	78 <b>.3</b> 4	15	1:00 p.m.	80.30
	22	10:40 a.m.	78.29	22	9:27 a.m.	80.55
Apr.	5	11:10 a.m.	78.23	29	10:35 a.m.	80.64
-	12	11:00 a.m.	78.31	Sept. 5	11:15 a.m.	80.65
	19	9:40 a.m.	75.71	12	11:30 a.m.	80.57
	26	9:10 a.m.	78.55	19	9:45 a.m.	80 <b>.43</b>
May	3	10:30 a.m.	78.64	26	8:45 a.m.	80.18
	9	10:30 a.m.	78.88	0ct. 3	11:10 a.m.	80.23
	13	11:30 a.m.	79.06	10	10:20 a.m.	80.28
	16	12:00 noon	79.17	17	11:00 a.m.	80.30
	23	10:30 a.m.	79.58	24	12:15 p.m.	80.43
	30	10:25 a.m.	79.43	31	11:55 a.m.	80.44
June	6	11:15 a.m.	79.73	Nov. 7	11:00 a.m.	80.66
	13	11:10 a.m.	79.67	14	4:20 p.m.	80.65
	20	9:35 a.m.	79.70	20	10:40 a.m.	80.77
	27	10:10 a.m.	79.65	27	11:37 a.m.	80.75
July	4	9:25 a.m.	79.74	Dec. 4	1:00 p.m.	80.85
•	11	11:20 a.m.	79.70	11	2:03 p.m.	80.98
	18	9:15 a.m.	79.77	17	10:45 a.m.	81.25
	25	10:25 a.m.	79.91	25	1:30 p.m.	81.12
Aug.	1	10:30 a.m.	80.11			

#### St. Tammany Parish

- St-2. Mayer Israel.  $NE_4^1$  sec. 7, T. 6 S., R. 11 E., Covington. Pressure, in pounds per square inch, 1940: July 25, 10:00 a.m., 37.
- St-4. Poitevent and Favre Lumber Company. SWinEi sec. 9, T. 7 S., R. 12 E., on north side of Highway 114. Water level, in feet above gage, 1940; June 14, 6.2.
- St.6. Poitevent and Favre Lumber Company. SW1SW1 sec. 17, T. 7 S., R. 13 E., on south side of Highway 114. Water level, in feet above gage, 1940: June 14, 6.1.
  - St-9. Measurements discontinued.
- St-10. State Fish Hatchery. Sec. 38, T. 8 S., R. 12 E., Lacombe, south well. Pressure, in pounds per square inch, 1940: July 25, 16.
- St-12. Tchefuncte State Park. Sec. 43, T. 8 S., R. 12 E., Golf Course. Pressure, in pounds per square inch, 1940: July 25, 23.7.
- St-16. Great Southern Lumber Company. Sec. 20, T. 5 S., R. 13 E., 0.5 mile south and 1.5 mile west of Bush. Pressure, in pounds per square inch, 1940: July 25, 11.3.

#### Tangipahoa Parish

- Ta-5. Southern United Ice Company. Amite, at rear of lot behind ice plant. Water level, in feet above gage, 1940: June 10, 9.3.
- Ta-7. Town of Ponchatoula. About 50 feet west of pumping station. Water level, in feet above gage, 1940: June 7, 8.5.
- Ta-8. Louisiana Cypress Lumber Company. NE<sub>4</sub>SW<sub>4</sub> sec. 45, T. 7 S., R. 8 E., Ponchatoula, about 200 yards west of Highway 122, at railroad spur on road to lumber mill. New measuring point, gage on 1-inch sleeve, 0.5 foot above land surface. Water level, in feet above gage, 1940: May 28, 5.5.
  - Ta-9. Measurements discontinued.

## Tangipahoa Parish--Continued.

- Ta-10. Williams Lumber Company.  $NW_2^1SE_2^1$  sec. 45, T. 7 S., R. 8 E., 1 mile south of Ponchatoula at arch across Highway 122. Water level, in feet above gage, 1940: May 28, 17.2
  - Ta-13. Measurements discontinued.
- Ta-14. Illinois Central System.  $NW_2^1$  sec. 7, T. 7 S., R. 8 E., Hammond, 300 yards north of coal chute. Pressure, in pounds per square inch, 1940: June 10, 50.7.
- Ta-17. Carl Blumquist. Center  $NE_{2}^{1}$  sec. 6, T. 6 S., R. 8 E., in field corner. Water level, in feet above measuring point, 1940: May 28, 2.5.
- Ta-19. V. Stevens. SENNE sec. 26, T. 7 S., R. 8 E., in field. Water level, in feet above gage, 1940: May 28, 16.0.
- Ta-21. Burns Davis.  $N_2^+$  irreg. sec. 54, T. 7 S., R. 7 E., at shed. Water level, in feet above gage, 1940: May 24, 7.0.
- Ta-22. W. B. Cornwell. Center sec. 31, T. 6 S., R. 7 E., at rear of house. Pump installed. Measurements discontinued, May 24, 1940. Water level, in feet above measuring point, 1940: May 24, estimate 0.5.
- Ta-23. Otto Bignor. South line, sec. 50, T. 7 S., R. 7 E., in field. Water level, in feet above measuring point, 1940: May 24, 2.7.
- Ta-24. Clyde Starkey. Center sec. 53, T. 7 S., R. 7 E., in field. Water level, in feet above gage, 1940: May 24, 4.3.
- Ta-36. Town of Kentwood. About 20 feet north of reservoir at pumping station, 2 blocks east of Highway 51. Water level, in feet above gage, 1940: June 10, 21.3.

#### Washington Parish

Wa-1. Mount Hermon CCC Camp. Mount Hermon, 1 mile west on State Highway 71. Abandoned drilled domestic well, diameter 4 inches, depth 346 feet. Measuring point, bottom edge 2-inch elbow, 1.4 feet above land surface. Water level, in feet below measuring point, 1940: Aug. 21, 70.58.

## By S. L. Schoff

The observation-well program in Oklahoma, reported in Water-Supply Papers 840, 845, and 886, was continued in 1940 as part of the investigation of ground-water resources of the State by the Federal Geological Survey in cooperation with the Oklahoma Geological Survey. This investigation was begun in 1937 as a study of ground water in the Oklahoma Panhandle, and most of the observation wells are in that part of the state. In 1939, however, water-level measurements were begun in a well in Cleveland County, and in 1940 the program was expanded further by the addition of 2 observation wells near Supply and Laverne and the inclusion of records obtained by the Oklahoma City Water Department in 9 wells along the North Canadian Valley between Yukon and Woodward. Records for wells in the Stillwater Creek area of the Soil Conservation Service are included in this report in the section on Payne County.

The general geology and ground-water resources of the Panhandle were described in Water-Supply Papers 840 and 845, and the geologic relationships of the well in Cleveland County were described in Water-Supply Paper 886. The part of the North Canadian River valley that contains the observation wells added to the program in 1940 extends from the west line of Harper County, near Laverne, to Yukon, which is about 15 miles west of Oklahoma City. It crosses parts of Harper, Ellis, Woodward, Major, Dewey, Blaine and Canadian Counties. The part above the mouth of Wolf Creek, at Supply, is known locally as Beaver River.

A detailed study has not been made of the ground-water resources of the stretch of the valley considered here, but Gould in 1905 summarized the water resources of the North Canadian River in Oklahoma, and in 1913 Phillips, Alvord, and Billingsley reported on the possibilities of obtaining a water supply for Oklahoma City from wells in the alluvium of the valley. Two years later the Geological Survey published a report by Schwennesen on ground water for irrigation in the part of the valley near Oklahoma City.

<sup>1/</sup> Gould, C. N., Geology and water resources of Oklahoma: U. S. Geol. Survey Water-Supply Paper 148, pp. 91-92, 1905.

<sup>2/</sup> Phillips, H., Alvord, J. W., and Billingsley, J. W., A report to the mayor and board of commissioners of Oklahoma City on an improved water supply for the city: Chicago Printing and Embossing Co., pp. 98-118, 1913.

<sup>3/</sup> Schwennesen, A. T., Ground water for irrigation in the valley of North Fork of Canadian River near Oklahoma City, Oklahoma: U. S. Geol. Survey Water-Supply Paper 345, pp. 41-51, 1915.

The valley of the North Canadian River between the west line of Harper County and Oklahoma City is a trough excavated in upper Permian rocks that consist of red shales and fine sandstones, and gypsum. A strip of sand hills and terrace deposits lies along the north and northeast side of most of this stretch of the valley, and the trough itself has been partly filled with river sands, gravels and silts that in places are more than 50 feet thick. These river sands and gravels are the principal source of ground water for wells in the valley, and several towns and irrigators draw upon this supply. Oklahoma City, however, relies on the flow of the river, which in recent years has been almost entirely flood flow.

In 1930 the Oklahoma City Water Department established 54 observation wells in the river channel between El Reno and Supply, and made weekly measurements of water level in them between August 5 and October 15. From 8 to 11 measurements were made in each well. During most of this period there was a flow in the river, with occasional floods, and at times the water levels in the wells stood as much as 4 feet above the bottom of the channel. In 1 well, however, the water level declined to a level 3.6 feet below the channel on September 11, 1930. An additional measurement was made in each of 24 wells about the middle of November 1931. Many of the wells, however, were washed out and the measurements were discontinued.

The city water department again undertook measurements in wells as a means of determining the depth of the water table below the river channel when a prolonged drought and lack of floods in the last half of 1939 resulted in a shortage of water in the Oklahoma City reservoir. In December of that year 9 wells consisting of 2-inch pipes with blow-torch perforations near the lower end were sunk at strategic points along the river between Yukon and Woodward. Of these wells, 7 were on the flood plain near the channel and 2 were in the channel near El Reno and Yukon. The 2 wells near El Reno and Yukon were replaced by similar wells on the flood plain in April 1940.

Water-level measurements in 1940 were made in 124 wells in Oklahoma, of which 39 are in Beaver County, 2 in Blaine County, 4 in Canadian County, 29 in Cimarron County, 1 in Cleveland County, 1 in Harper County, 1 in Major County, 44 in Texas County, and 3 in Woodward County.

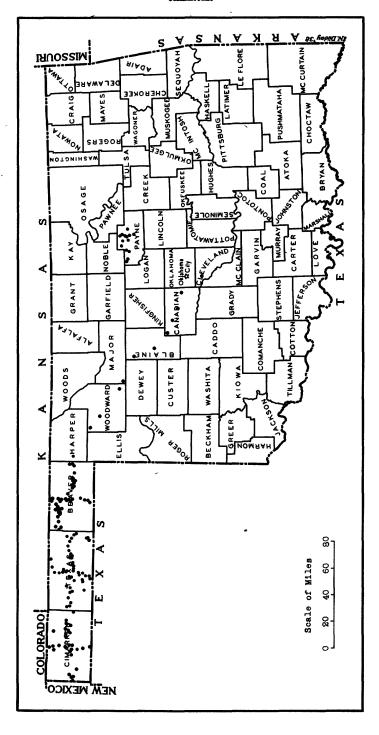


Figure 4.--Map showing location of observation wells in Oklahoma.

Observation wells in the Panhandle (Beaver, Cimarron and Texas Counties) have been measured bimonthly, in January, March, May, July, September and November, and the number of measurements in individual wells has ranged from 1 to 6. The wells near Laverne (Harper County 1) and Supply (Woodward County 3) are measured twice a year, before and after the irrigation season. The wells of the Oklahoma City Water Department are usually measured about once a month, but in the last half of 1940 were measured only twice. The Cleveland County well is measured weekly during the winter and at irregular intervals during the rest of the year.

Of the 683 measurements made in the observation wells in 1940. 209
were made in Beaver County, 11 in Blaine County, 43 in Canadian County,
139 in Cimarron County, 34 in Cleveland County, 2 in Harper County, 10 in
Major County, 216 in Texas County, and 20 in Woodward County. In addition
to these periodic measurements, an automatic water-stage recorder of the
float type was maintained throughout the year on Beaver County well 528.

In 1940, the investigation of the ground-water resources of Beaver County was continued, and several brief studies of possible ground-water supplies for municipalities and state institutions in Oklahoma were made. A summary of the ground-water resources of the Oklahoma Panhandle, by the writer, was published in Economic Geology.

### Fluctuations of water level, 1938-40

During the period of record, 1938-40, the water levels in wells in the Panhandle-Beaver, Cimarron, and Texas Counties-have risen slowly without large fluctuations. The average water level at the end of November 1940 was 0.05 foot higher than in November 1939 and 0.10 foot higher than in November 1938, at which time the lowest stage was recorded. It was, however, 0.09 foot below the highest stage, which was reached in May 1940. The highest stage in 1939 was reached in September and was 0.04 foot below the level of May 1940.

This general rise has been most pronounced in Beaver County, where water levels in wells drawing from the Ogallala formation have risen enough to offset the decline of the water levels in wells in some other aquifers and other localities. The November averages for 1939 and 1940 were 0.16 foot and 0.30 foot, respectively, above the average for November 1938, which was the lowest average stage recorded for the county. The

<sup>4</sup>/ Schoff, S. L., Ground water in the Oklahoma Panhandle: Econ. Geol., Vol. XXXV, pp. 534-545, 1940.

highest recorded stage occurred in July 1940, but it was only 0.04 foot above the stage for November of the same year.

In Cimarron County, the average water level in November 1939 was 0.06 foot above the average for November 1938, but by November 1940 it had declined to the 1938 level. The average water level for this county, however, has fluctuated through a wider range than the average water levels of Beaver and Texas Counties. The lowest stage occurred in July 1938, at the beginning of the record, and was followed by an irregular rise of 0.41 foot to the highest stage, which was reached in May 1940.

The record for Texas County is the longest in the Panhandle and shows the least range of fluctuation in water level. The highest stage for this county was reached in September 1938, and was 0.13 foot above the low stage, which was reached two months later. The average water levels for November 1939 and November 1940 were 0.07 foot and 0.01 foot, respectively, below the average for November 1938.

In all three of the Panhandle Counties, the maximum fluctuations of water level for groups of wells have occurred in wells tapping water in the alluvium. The following tables present not only average water levels in several groups of wells in each county, but weighted averages for the Panhandle as a whole, in feet above assumed datum planes. These averages are similar to those given in corresponding tables in Water-Supply Paper 886, but differ in detail because of revision of the figures for several of the wells and the inclusion of wells that had been omitted until enough information was available to permit selection of datum planes for The most obvious change is in the water levels for red beds in Texas County. This aguifer is represented by one well (No. 294), the The wells in western Cimarron datum for which has been raised 0.14 foot. County that may tap water in the Dakota sandstone have been grouped with upland wells tapping the Ogallala formation because further study has shown that they cannot be distinguished with certainty from the wells in the Ogallala.

Average water levels, in feet above datum planes, in groups of wells in the Oklahoma Panhandle, 1938-1940

	Bea	aver Co	ınt <del>y</del>	Cimarro	n County	Tex	Texas County		
Date	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1938							,		
January	• • • • •					99.94		99.88	
March						100.02		100.01	
May July						100.01		100.38	
July	100.17	100.12	100.49	99.89	99.51	100.02		100.15	
September	100.14	100.13	100.22	100.01	100.43	100.02	100.03	100.19	
November	100.00	100.00	100.00	100.00	100.00	100.00		100.00	

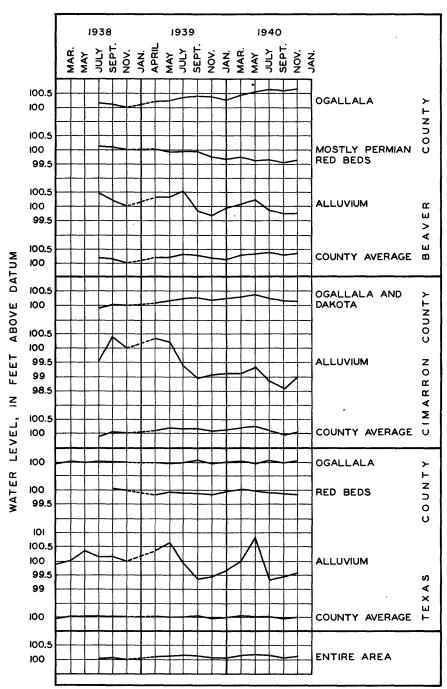


Figure 5.--Hydrographs showing average water levels in wells tapping water in different aquifers in the Panhandle Counties, Oklahoma.

Average	water	levels,	in.	feet	evoda	datum	planes,	in
groups of well	s in t	he Okla	homa	Panh	andle.	. 1938-	·1940C	ontinued

	Ве	aver Co	ınty	Cimarro	on County Texas County		Texas Coun	
Date	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1939								
April	100.22	100.07	100.34	100.06	100.32	100.00	99.83	100.37
May	100.26	99.92	100.32	100.19	100.20	99.97	99.93	100.61
July	100.39	99.93	100.53	100.24	99.33	100.00	99.90	99.90
September	100.42	99.92	99.84	100.28	98.96	100.10	99.89	99.33
November	100.40	99.72	99.69	100.17	99.05	99.96	99.86	99.43
1940								
January	100.28	99.67	99.97	100.23	99.12	100.00		99.66
March	100.46	99.75	100.05	100.30	99.12	100.05	100.04	99.99
May	100.58	99.60	100.24	100.36	99.38	99.96	100.00	100.82
July	100.68	99.65	99.84	100.23	98.81	100.05	99.92	99.31
September	100.59	99.53	99.76	100.12	98.57	99.99		99.47
November	100.65	99.62	99.74	100.11	99.01	100.02	99.82	99.54

#### Explanation

- (1) Beaver County, northern and western part; wells tap water chiefly in Ogaliala formation.
- (2) Beaver County, southern and eastern part; wells tap water in Permian red beds and in Ogallala formation.
- (3) Beaver County, eastern half; wells tap water in alluvium of North Canadian (Beaver) River, and its tributaries.
- (4) Cimarron County, upland flats; wells tap water in Ogallala formation, and in the extreme western part of the county wells tap water in the Dakota sandstone.
- Cimarron County, wells tap water in alluvium of North Canadian (Beaver) and Cimarron Rivers.
  - (6) Texas County, upland flats; wells tap water in Ogallala formation.
  - Texas County, well 294; taps water in red beds.
- Texas County, wells tap water in alluvium of North Canadian River and its tributaries.

Weighted average water levels in wells in Beaver, Cimarron, and Texas Counties, Oklahoma Panhandle, in feet above datum planes, 1938-40

			- •	
Date	Beavera/	Cimarron b/	Texas <sup>c</sup> /	Entire Panhandled
1938				
January			99.94	
March		*****	100.02	••••
Ma <del>y</del> July			100.03	•••••
July	100.19	99.85	100.03	100.02
September	100.15	100.05	100.03	100.07
November	100.00	100.00	100.00	100.00

a/ Wells in Ogallala formation in northwestern part of the county, 65 percent; wells in eastern and southern part, mostly in Permian rocks, 25 percent; wells in alluvium, 10 percent.

b/ Wells on upland, in Ogallala and (?) Dakota formations, 90 percent; wells in alluvium, 10 percent.

c/ Method of averaging depends on availability of water levels in red-bed well. January-July and November 1938, and January and September 1940, as follows: wells in Ogallala formation, 95 percent; wells in alluvium, 5 percent. Other dates: wells in Ogallala formation, 95 percent; well in red beds, 2 percent; wells in alluvium, 5 percent.

d/ Average of figures in first three columns.

November

Date	Beaver a/	Cimarron b/	Texasc/	Entire Panhandle
Date	Deaver	CIMAL TON	10708	BILLIO TAMIANCIO
1939				
April	100.19	100.09	100.02	100.10
May	100.18	100.19	100.00	100.12
July	100.29	100.15	99.99	100.14
September	100.24	100.15	100.06	100.15
November	100.16	100,06	99.93	100.05
1940				
January	100.10	100.12	99.98	100.07
March	100.24	100.18	100.05	100.16
May	100.30	100.26	100.00	100.19
July	100.34	100.09	100.01	100.15
Sentember	100.24	99.96	99.96	100.06

100.00

99.99

100.10

100.30

Weighted average water levels in wells in Beaver, Cimarron, and Texas Counties, Oklahoma Panhandle, in feet above datum planes, 1938-40--Continued

The average water level for observation wells along the North Canadian River, -- wells in Blaine, Canadian, Harper, Major, and Woodward Counties, and wells of this type in the Panhandle Counties -- has fluctuated through a range of 2.54 feet in the period 1938-40. Low levels are usually reached in the fall. Part of the fluctuations indicated in the table are probably due to irregularities in the number and geographic distribution of the wells included in the different monthly averages, but part are due to the effect of floods in the river, to recharge in the alluvium by penetration of rainfall, to transpiration by plants, and to evaporation where the water table is near the surface.

The record of the automatic water-stage recorder on Beaver County well 528 showed the effects of floods in the river in 1940. On May 17 and 18 heavy rains totaling 1.65 to 2.38 inches were recorded at stations of the U. S. Weather Bureau in the Panhandle. A flood in the river resulted and the water level in the well, which is about 1,700 feet from the channel. rose 0.27 foot between 6 p.m. on May 18 and noon on May 23. A more pronounced effect was recorded from August 15 to 18, when the water level in the well rose 1.44 feet in about 59 hours during and immediately following

a/ Wells in Ogallala formation in northwestern part of the county, 65 percent; wells in eastern and southern part, mostly in Permian rocks, 25 percent; wells in alluvium, 10 percent.

b/ Wells on upland, in Ogallala and (?) Dakota formations, 90 percent; wells in alluvium, 10 percent.

c/ Method of averaging depends on availability of water levels in redbed well. January-July and November 1938, and January and September 1940, as follows: wells in Ogallala formation, 95 percent; wells in alluvium, 5 percent. Other dates: wells in Ogallala formation, 93 percent; well in red beds, 2 percent; wells in alluvium, 5 percent.

d/ Average of figures in first three columns.

OKLAHOMA 57

a flood. On the other hand, precipitation totaling 2.49 to 3.31 inches between November 19 and 26 failed to produce a flow in the river, but on the 26th the water level in the well began a slow rise that continued until December 15.

Average water levels, in feet above datum planes, in wells in alluvium along North Canadian River, 1938-40

Date	Water level	Location of wells					
1938							
July 23-Aug. 5	99.19	Boise City to west line of Harper County					
Sept.19-22	100.05	Boise City to west line of Harper County					
Nov. 18-27	100.00	Boise City to west line of Harper County					
1939	_						
Apr. 1-10	100.50	Boise City to west line of Harper County					
May 22-26	100.12	Boise City to west line of Harper County					
July 19-28	99.50	Boise City to west line of Harper County					
· Sept.23-29	99.11	Boise City to west line of Harper County					
Nov. 18-24	99.34	Boise City to west line of Harper County					
Dec. 15	99.01	Beaver to Yukon					
1940							
Jan. 12-30	99.56	Boise City to Yukon					
Feb. 4	99.63	Beaver to Yukon					
Feb. 24	100.42	Beaver to Yukon					
Mar. 2	100.18	Beaver to Yukon					
Mar. 21-Apr. 2	99.89	Boise City to Yukon					
May 9	100.79	Beaver to Yukon					
May 20-25	101.16	Boise City to Yukon					
June 23	101.55	Beaver to Yukon					
July 22-Aug. 9	99.46	Boise City to Yukon					
Sept.21-26	99.27	Boise City to west line of Harper County					
Nov. 20-Dec. 4	99.61	Boise City to Yukon					

The water level in the Cleveland County observation well fluctuated through a range of 2.37 feet from March 31, 1939, to December 23, 1940. The highest water level recorded in 1939 was 15.05 feet below the measuring point, on September 12, and the lowest was 16.24 feet, on November 14. From January to May 1940 the water level fluctuated between 15.72 feet below the measuring point and 17.08 feet (the record low). From June 21 to July 27 the water level rose 1.2 feet, probably as a result of heavy precipitation, which averaged 2.51 inches above the normal for July at Oklahoma City and Norman, the nearest stations of the U. S. Weather Bureau. This rise was followed by a decline that is poorly recorded because of infrequent measurements. From November to December 23 the water level rose 0.57 foot, reaching the highest level yet recorded. This rise was probably due to heavy precipitation, which for November averaged 3.35 inches above the normal at Oklahoma City and Norman. Over 90 percent of this precipitation came between November 19 and 26.

### Precipitation, 1940

Precipitation in the Panhandle for the year ending November 30, 1940, ranged from 12.69 inches at Kenton to 18.83 inches at Beaver, and the average for the 5 stations was 16.49 inches. This was 1.06 inches below the normal annual precipitation for the area. Departures at individual stations ranged from 1.14 inches above normal at Hooker to 5.33 inches below normal at Kenton.

For the same period the precipitation at 7 stations along the North Canadian Valley from Oklahoma City to Supply ranged from 16.45 inches at Supply to 33.84 inches at Oklahoma City. The annual departures at 5 of these stations ranged from 2.69 inches above normal at Oklahoma City to 7.36 inches below the normal at Geary, and averaged 2.01 inches below normal.

The Cleveland County observation well is about half way between Oklahoma City and Norman, and the precipitation reported at both of these cities, therefore, must be considered in interpreting the water-level record for the well. For the year ending November 30, 1940, the average for these two stations was 33.96 inches--1.73 inches above the normal annual precipitation. Significant details of the record for the year have been mentioned in the discussion of the water-level fluctuations in the well.

### Pumpage in the Panhandle

The amount of water pumped from the larger municipal, industrial, and irrigation wells in the Oklahoma Panhandle in 1940 is estimated to be about 1,786 acre-feet, divided as follows: Beaver County, 246 acre-feet; Cimarron County, 74 acre-feet; Texas County, 1,466 acre-feet.

### Water-Level Records

The records of water-level measurements on the following pages are listed alphabetically by counties and in numerical order within the counties.

### Beaver County

- 61. John R. Woodson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 1 N., R. 23 E. Measurements discontinued.
- 62. Ray D. Hall. SE\(\frac{1}{4}\) Sec. 14, T. 1 N., R. 23 E. Beginning Sept. 22, 1940, measurements were made from top of west block of wooden pipe clamp on north side of pipe, 1 foot above land surface, 0.41 foot above bench mark and 0.56 foot above original measuring point. Water levels, in feet below original measuring point, 1940: Jan. 29, 162.29; Mar. 20, 162.25; Sept. 22, 162.43; Nov. 21, 162.36.

116.98 116.73

## Beaver County -- Continued.

81. L. T. Adelman. SW\(\frac{1}{2}\)SE\(\frac{1}{2}\)SW\(\frac{1}{2}\) sec. 7, T. 1 N., R. 24 E. Well was repaired and put in use late in 1939, and measuring point was lowered 0.03 foot. Water level, in feet below original measuring point, 1940: July 27, 165.72.

Dave and Minnie Hodson. SW1SW1SW1 sec. 4. T. 2 N. R. 24 E.

	258.	Frank S. Flyn		V‡ sec. 31, T.		Tii •
			, in reet be	olow measuring	3 point, 1940	Wahaa
Date		Water level	Date	Water level	Date	Water level
Jan.	20	50,68	May 21		Sept.22	50.80
Mar.		50.74	July 27	50.80	Nov. 21	50.84
	401.	m m Yamala	welweler.	- T T T	5 N., R. 24 E.	
	#OI.				g point, 1940	'
Jan.	29	93.68	May 21	93.60	Sept.27	93.57
Mar.		93.62	July 27	93.41	Nov. 22	93.60
	416.	Otto Bomber	at al SELS	FANGA see 1	T. 3 N., R. 2	25 TC
	ATO.			elow measuring		
Jan.	30		May 20	120.87	Sept.21	120.98
Mar.	21	120.82	July 27	120.95	Nov. 21	121.10
at n	ew wel	measuring point ll, which is to tower.	op of head o	f lower bolt		leg of
at n wind	ew well to will to wil	neasuring point il, which is to tower. Vater level, in 13.28	op of head of feet below July 27	f lower bolt  original mea	oot above new in southeast l	leg of
at n wind	ew welmill t	measuring point il, which is to tower. Vater level, in	op of head o	f lower bolt original mea	in southeast l	leg of
at n wind	ew well to will to wil	measuring point il, which is to tower. Vater level, in 13.28 13.34	op of head on feet below July 27 Sept.22	original mea	in southeast l	leg of 1940 13.5
at n wind Mar. May	ew welmill to well 21 20 418.	neasuring point il, which is to lower. Vater level, in 13.28 15.34  Nile J. Mosbu	at old welcop of head on feet below July 27 Sept.22 urg. SE\frac{1}{2}SW\frac{1}{2}	original mea	suring point, Nov. 21	leg of 1940 13.5
at n wind Mar. May	ew welmill to well 21 20 418.	Mater level, in Mater level, in Mater level, in Mater level, in Mater level Water level Water level 65.11	op of head on feet below July 27 Sept.22 carg. SE\frac{1}{2}SW\frac{1}{2}\text{ in feet b}	original mea  12.72 13.07  SW4 sec. 12, elow measurin, 65.23	suring point, Nov. 21 T. 3 N., R. 28 g point, 1940 Sept.22	1940 13.55
at n wind	ew welmill to well 21 20 418.	measuring point Il, which is to lower. Vater level, in 13.28 15.34  Nile J. Mosbu Water level	op of head on feet below July 27 Sept.22 carg. SE\frac{1}{2}SW\frac{1}{2}\text{ in feet b}	original mea  12.72 15.07  SW1 sec. 12, elow measurin	suring point, Nov. 21 T. 3 N., R. 28 g point, 1940 Sept.22	leg of 1940 13.5
at n wind Mar. May	21 20 418.	Mater level, in Mater level, in Mater level, in Mater level, in Mater level Water level Water level 65.11	t at old wellop of head on feet below July 27 Sept.22  urg. SE½SW½ 1, in feet b  May 20 July 27	original mea  12.72 13.07  SW1 sec. 12, elow measurin, 65.23 65.34	suring point, Nov. 21 T. 3 N., R. 28 g point, 1940 Sept.22 Nov. 21	1940 13.5: 5 E. 65.4: 65.3:
at n wind Mar. May	21 20 418.	Nile J. Mosb Water level 65.15 State of Okla	t at old well op of head of n feet below July 27 Sept.22 urg. SE4SW4 1, in feet b May 20 July 27 ahoma. SW4S	original mea  12.72 13.07  SW1 sec. 12, elow measurin, 65.23 65.34  E18E1 sec. 8,	suring point, Nov. 21 T. 3 N., R. 28 g point, 1940 Sept.22 Nov. 21	1940 13.5: 5 E. 65.4: 65.3:
at n wind Mar. May Jan.	ew welmill to well and well an	water level, in 13.28 15.34  Nile J. Mosbu Water level 65.11 65.15  State of Okle Water level 73.58	op of head on feet below July 27 Sept.22 surg. SE\frac{1}{2}SW\frac{1}{2}\text{.} in feet below May 20 July 27 shoma. SW\frac{1}{2}S\frac{1}{2}\text{.} in feet below May 20 July 27 shoma. SW\frac{1}{2}S\frac{1}{2}\text{.} in feet below May 20	original mea  12.72 13.07  SW\(\frac{4}{3}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{4}{3}\) SE\(\frac{4}{3}\) sec. 8, elow measurin 73.66	suring point, Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 2 g point, 1940 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22	1940 13.53 5 E. 65.44 65.33
at n wind Mar. May Jan.	ew welmill to well and well an	Nile J. Mosb Water level 65.11 State of Okla Water level	t at old well op of head o n feet below July 27 Sept.22 urg. SE\(\frac{1}{2}\)SW\(\frac{1}{2}\) l, in feet b May 20 July 27 shome. SW\(\frac{1}{2}\)Ships l, in feet b	original mea  12.72 13.07  SW\(\frac{1}{4}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{1}{4}\) Sec. 8, elow measurin measurin	suring point, Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 2 g point, 1940 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22	1940 13.55 5 E. 65.44 65.35
at n wind Mar. May Jan.	ew welmill to well and well an	Nile J. Mosb Water level 65.11 State of Okla Water level	op of head on feet below July 27 Sept.22 surg. SEASWALL, in feet below May 20 July 27 shoma. SWAS.	original mea  12.72 13.07  SW\(\frac{1}{4}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{1}{4}\) sec. 8, elow measurin 73.66 73.66	suring point, Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 2 g point, 1940 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22 Sept.22	1940 13.5: 5 E. 65.4: 65.3: 26 E.
at n wind Mar. May Jan. Mar.	ew welmill to well 21 20 418. 30 21 431. 432.	water level  State of Okle  Water level  73.58  73.58  73.92  George H. But  Water level	op of head on feet below July 27 Sept.22 surg. SE\frac{1}{2}SW\frac{1}{2}. in feet below July 27 shoma. SW\frac{1}{2}SL, in feet below July 27 shoma. SW\frac{1}{2}SL, in feet below July 27 ston. NW\frac{1}{2}NE, in feet below July 27 ston. NW\frac{1}{2}NE, in feet below In feet bel	original mea  12.72 13.07  SW\(\frac{1}{4}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{1}{4}\) sec. 8, elow measurin 73.66 73.66  \(\frac{1}{4}\) NE\(\frac{1}{4}\) sec. 10, elow measurin	suring point, Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 T. 3 N., R. 29 g point, 1940 Sept.21 Nov. 21 T. 3 N., R. 29 g point, 1940	1940 13.53 5 E. 65.44 65.33 26 E. 73.57 73.51
at n wind Mar. May Jan. Mar.	ew welmill to well to	Mater level, in 13.28 13.34  Nile J. Mosbu Water level 65.11 65.15  State of Okla Water level 73.58 73.92  George H. But Water level 31.19	t at old well op of head on n feet below July 27 Sept.22  urg. SE\frac{1}{2}SW\frac{1}{2}l  l, in feet b  May 20 July 27  ahoma. SW\frac{1}{2}Sl  in feet b  May 20 July 27  tton. NW\frac{1}{2}NE  l, in feet b	original mea  12.72 13.07  SW\(\frac{1}{4}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{1}{4}\) sec. 8, elow measurin 73.66 73.66  \(\frac{1}{4}\) NE\(\frac{1}{4}\) sec. 10, elow measurin 30.66	suring point, Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 29 g point, 1940 Sept.22 T. 3 N., R. 29 g point, 1940 Sept.21 Nov. 21 T. 3 N., R. 29 g point, 1940	1940 13.55 5 E. 65.44 65.35 26 E. 73.57 73.53
at n wind Mar. May	ew welmill to well to	Mater level, in 13.28 13.34  Nile J. Mosbu Water level 65.11 65.15  State of Okla Water level 73.58 75.92  George H. But Water level 31.19 31.11	op of head on feet below July 27 Sept.22 urg. SELSWL. in feet below May 20 July 27 shoma. SWL. in feet below May 20 July 27 tton. NWLNE, in feet below July 27 Sept.21	original mea  12.72 13.07  SW\(\frac{1}{2}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{1}{2}\) sec. 8, elow measurin 73.66 75.66  \(\frac{1}{2}\) NE\(\frac{1}{2}\) sec. 10, elow measurin 30.66 30.32	suring point, Nov. 21  T. 3 N., R. 28 g point, 1940 Sept.22 Nov. 21  T. 3 N., R. 2 g point, 1940 Sept.22 Nov. 21  T. 3 N., R. 2 g point, 1940 Sept.21 Nov. 21  T. 3 N., R. 2 g point, 1940 Nov. 21	1940 13.53 5 E. 65.44 65.33 66 E. 73.57 73.36
at n wind Mar. May Jan. Mar.	ew welmill to well to	measuring point Il, which is to tower.  Vater level, in  13.28 15.34  Nile J. Mosbu Water level 65.11 65.15  State of Okle Water level 73.58 73.92  George H. But Water level 31.19 31.11  Federal Land	Tat old well op of head on n feet below July 27 Sept.22  urg. SE\s\\\^2sW\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	original mea  12.72 13.07  SW\dagger sec. 12, elow measurin, 65.23 65.34  E\dagger sec. 8, elow measurin 73.66 73.66  \dagger sec. 10, elow measurin 30.66 30.32	suring point, Nov. 21 T. 3 N., R. 28 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 2 g point, 1940 Sept.22 T. 3 N., R. 2 g point, 1940 Sept.21 Nov. 21 T. 3 N., R. 2 g point, 1940 Nov. 21 T. 3 N., R. 2 g point, 1940 Nov. 21	1940 13.53 5 E. 65.44 65.33 66 E. 73.57 73.36
Mar. May  Jan. Mar.	ew welmill to well to	measuring point Il, which is to tower.  Vater level, in  13.28 15.34  Nile J. Mosbu Water level 65.11 65.15  State of Okle Water level 73.58 73.92  George H. But Water level 31.19 31.11  Federal Land	Tat old well op of head on n feet below July 27 Sept.22  urg. SE\frac{1}{2}SW\frac{1}{2}: 1, in feet b  May 20 July 27  ahoma. SW\frac{1}{2}Si, in feet b  May 20 July 27  tton. NW\frac{1}{2}NE 1, in feet b  July 27 Sept.21  Bank. NE\frac{1}{4}NI 1, in feet b	original mea  12.72 13.07  SW\(\frac{1}{2}\) sec. 12, elow measurin, 65.23 65.34  E\(\frac{1}{2}\) sec. 8, elow measurin 73.66 75.66  \(\frac{1}{2}\) NE\(\frac{1}{2}\) sec. 10, elow measurin 30.66 30.32	suring point, Nov. 21 T. 3 N., R. 28 g point, 1940 Sept.22 Nov. 21 T. 3 N., R. 2 g point, 1940 Sept.22 T. 3 N., R. 2 g point, 1940 Sept.21 Nov. 21 T. 3 N., R. 2 g point, 1940 Nov. 21 T. 3 N., R. 2 g point, 1940 Nov. 21	1940 13.53 5 E. 65.44 65.33 66 E. 73.57 73.36

434. J. W. Hibbs, et al. SW1NW1NW1 sec. 15, T. 3 N., R. 26 E. Water level, in feet below measuring point, 1940

116.74

116.79

Sept.21 Nov. 21

May 20 July 27

Jan. 30 Mar. 21

116.91 116.84

446. Hib Richard. NW INE INW | sec. 15, T. 3 N., R. 27 E. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 30 May 20	25.23 25.30	July 27 Sept.21	24.84 25.15	Nov. 21	25.32

461. Arthur E. Sharp. NE SE NE sec. 3, T. 3 N., R. 28 E. Measurements discontinued.

462. C. G. and W. A. Sawin. Swiswinwi sec. 3, T. 3 N., R. 28 E. Water level, in feet below measuring point, 1940

	 ,	zem menpurang perme	,
Jan. 30 Mar. 21	May 20 July 27	40.67 Sept. 40.83 Nov.	

464. N. W. Johnson.  $NE_{4}^{1}NE_{4}^{1}$  sec. 9, T. 3 N., R. 28 E. Water level, in feet below measuring point, 1940

	MSTOT. TOAGT	THI TOOL	DOLON TOGOTITUE	porme, reso	
Jan. 30 Mar. 21		May 20 July 27	114.10 113.37	Sept.21 Nov. 21	114.43 114.55

518. Pete Sanders Estate. NE1SE1SE1 sec. 36, T. 4 N., R. 23 E. Water levels, in feet below measuring point, 1940: Jan. 29, 39.54; Mar. 20, 39.46; Sept. 22, 40.76; Nov. 22, 39.76.

523. Frances M. Hancock. SW 2SW 2SW 2 sec. 24, T. 4 N., R. 24 E.

	Water level	, in feet b	elow measuring point, 1940	
Jan. 29		May 20	23.51 Sept.22	24.73
Mar. 21		July 27	24.06 Nov. 21	24.61

525. V. V. Cosner. NE1NE1SE1 sec. 27, T. 4 N., R. 24 E. Measurements discontinued.

526. Elmer E. Thompson. SW\(\frac{1}{4}\)SE\(\frac{1}{4}\)SW\(\frac{1}{4}\) sec. 30, T. 4 N., R. 24 E.

	Water level	, in fe	eet below	measuring	point, 1940	
Jan. 29	40.78				Sept.22	40.83
Mar. 20	40.74	July 2	26	40.76	Nov. 22	40.80

527. Mrs. Ellen F. Williams. SWANWANWA sec. 30, T. 4 N., R. 24 E. Water level, in feet below measuring point, 1940

-							
Jan.		47.51	May	21	48.09	Sept.22	47.77
Mar.	20	47.45	July	26	47.73	Nov. 22	47.70

528. Oklahoma Electric and Water Co. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 4 N., R. 24 E. (Erroneously reported as NW $\frac{1}{4}$ SE $\frac{1}{4}$  in Water-Supply Paper 886.)

Lowest daily water level, in feet below measuring point, on selected dates, 1940 (from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1 8 14 22 29 Feb. 5 12 19 26 Mar. 4	20.36 20.33 20.32 20.29 20.29 20.29 20.22 20.09 19.96 19.87	Mar. 11 18 25 Apr. 1 8 14 22 29 May 6	19.81 19.76 19.72 19.69 19.71 19.69 19.56 19.55 19.53	May 17 18 19 20 21 22 23 24 28 30	a 19.55 b 19.54 c 19.50 19.32 19.29 19.26 19.25 19.31	June 3 5 6 7 10 11 12 14 17	19.35 19.42 d 19.40 19.25 e 19.30 19.26 19.17 19.13 19.21 19.50

- a Precipitation at Beaver and upstream stations, 0.27 inch to 2.15
- inches.
  b Precipitation at Beaver and upstream stations, 0.86 inch to 2.12
  - North Canadian River in flood.
- Precipitation at Beaver, 1.35 inches. Precipitation at Beaver and upstream stations, 1.08 inches to 2.13 inches.

528. -- Continued.

Lowest daily water level, in feet below measuring point, on selected dates, 1940 (from recorder charts)

Date		Water level	Date	Water level	Date	Water level	Date		Water level
July : 22 22 Aug. 11 11 11	5 9 5 5 <b>a</b>	19.85 20.09 20.37 20.62 20.82 20.96 20.98 20.88 20.78	Aug. 17 18 19 26 Sept. 2 9 16 22 30	19.57 b 19.46 19.53 20.03 20.35 20.55 20.65 20.78 20.60	Oct. 7 14 21 28 Nov. 1 8 11 18	20.59 20.64 20.60 20.58 20.57 20.53 20.52 20.47	Nov.	25 27 30 2 9 16 23 31	20.45 c 20.44 20.38 20.34 20.22 20.11 20.08 19.98

573. Federal Land Bank (Wichita).  $NW_{\frac{1}{2}}NW_{\frac{1}{4}}NW_{\frac{1}{4}}$  sec. 34, T. 4 N., R. 28 E.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 30	17.40	May 20	16.56	Sept.21	16.75
Mar. 21	16.95	July 27	16.79	Nov. 21	16.82

576. J. C. Peters. SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SW\(\frac{1}{2}\) sec. 2, T. 5 N., R. 20 E.

Weter level in feet below measuring point, 1940

	MATCHL TOAGT	, in leet	Delon meganitud	porne, rado	
Jan. 27 Mar. 22		May 22 July 26	160.39 160.04	Sept.23	159.99

577. W. A. Naylor. NE NE NE SE Sec. 19, T. 5 N., R. 20 E.

	Water level	, in feet belo	w measuring poi	nt, 1940
Jan. 27 Mar. 22	141.21 141.20		141.20 Sep 141.04 Nov	

578. J. M. Cleek. NW1NW1NE1 sec. 34, T. 5 N., R. 20 E. Bench mark set in 1939 was destroyed in 1940. Measuring point is 1.2 feet below U. S. Coast and Geodetic Survey bench mark R-10, which is 385 feet northwest of well on north side of U. S. Highway 64, beside corner post of former fence. Water levels, in feet below measuring point, 1940: May 22, 141.35; Nov. 22, 141.20.

591. A. J. Isaac.  $SE_{\overline{4}}^{1}SE_{\overline{4}}^{1}SE_{\overline{4}}$  sec. 12, T. 5 N., R. 21 E. Water level. in feet below measuring point. 1940

	MODOL TOLOT	, 111 1000	DOTON MORSULTINE	pormo, rose	
Jan. 27 Mar. 22		May 21 July 26		Sept.23 Nov. 22	192.86 192.79
mar, ac	199.00	oury 20	192,66	NOV. EE	184.18

593. Ada Allred. SE\frac{1}{2}S

	Mater Teast	, in reet b	elow measuring	point, 1940	
Jan. 27 Mar. 22	172.46 172.43		172.35 172.28		172.39 172.29

611. David Potter.  $SE_2^{1}SE_2^{1}NE_2^{1}$  sec. 2, T. 5 N., R. 22 E. Water levels, in feet below measuring point, 1940: Jan. 27, 181.56; Mar. 21, 181.32; May 21, 180.72.

613. T. J. Trew. SELSELSEL sec. 13, T. 5 N., R. 22 E. Water level: in feet below measuring point. 1940

	.0001 10401	, 11 1000	DOTON WORDSTTTE	Pozzio, zozo	
Jan. 27	68.30	May 21		Sept.23	66.25
Mar. 21	66.16	July 26		Nov. 22	66.45

- a North Canadian River in flood.
- b Reached high level at 19.42.
  c Precipitation at Beaver and upstream stations, Nov. 19-26, 2.49 inches to 3.31 inches.

614. Mrs. B. W. Lewis. SW ${2SE_2SE_3E}$  sec. 14, T. 5 N., R. 22 E. Water level, in feet below measuring point, 1940: May 21, 91.74.

grigrigri sec 16 T. 5 N. R. 22 K

	616.	Walter C. Fir	cher. SE	SELSEL sec. 16,	T. 5 N., R	. 22 E.
		Water level	, in feet	below measuring	point, 194	0
Date		Water level	Date	Water level	Date	Water level
Jan.	30	158.74	May 21	158.73	Sept.23	158.80
Mar.	21	158.74	July 26	158.53	Nov. 22	158.63
	617.		, in feet	below measuring	point, 194	
Jan.		169.77	May 21	169.67	Sept.22	169.49
Mar.	22	169.85	July 26	169.35	Nov. 22	169.49
R. 2	618. 2 E.			Society. NWINI		•
				below measuring		
Jan.		156.22	May 21	156.18	Sept.23	156.01
Mar.	ST	156.04	July 26	155.85	Nov. 22	156.04
	619.	Bank of Idans Water level	L, in feet	SE\frac{1}{2}SE\frac{1}{4}SE\fr	. 23, T. 5 N 3 point, 194	0
Jan.		82.09	May 21	80.85	Sept.23	80.38
Mar.	21	81.98	July 26	80.45	Nov. 22	80.94
	631.	Water leve	l, in feet	SELSWI sec. 4, 5	g point, 194	.0
Jan. Mar.		112.82 112.75	May 21 July 26	112.70 112.65	Sept.22 Nov. 22	112.78 112.67
	635.	A. E. Shillin Water level	ngburg. M	Wineinwi sec. 2	5, T. 5 N., g point, 194	R. 23 E. O
Jan.	29	62.72	May 21	62.77	Sept.22	62,66
Mar.	20	62.72	July 26	62.66	Nov. 22	62.67
R. 2	636. 3 E.			Society. NE		
				below measuring		
Jan. Mar.		112.38 112.13	May 21 July 26	112.26 112.69	Sept.22 Nov. 22	112.53 112.27
	647.			SW 4 sec. 8, T. below measuring		
Jan.		52.94	May 20	52.92	Sept.22	52.96
Mar.	21	52.93	July 26	52.92	Nov. 22	53.00
	648.			SW <sup>1</sup> sec. 19, T. below measuring		
Jan.		8.24	May 21	7.72	Sept.22	7.99
Mar.	20	8.22	July 26	8.46	Nov. 22	8.14
	649.	Arthur Willia Water leve		Wiswi sec. 30, 1 below measuring		
Jan.		10.38	May 21	9.67	Sept.22	10.90
Mar.	20	10.13	July 26	11.16	Nov. 22	10.61

<sup>766.</sup> George W. Elliott. SE\(\frac{1}{2}\)SE\(\frac{1}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)SE\(\

767. Robert F. LeCrone. SENENENE sec. 24, T. 6 N., R. 23 E.
Weten level in feet below measuring point. 1940

Date         level         Date         level         Date           Jan. 27         76.54         May 20         75.96         Sept.22	
Doto I lieto	75.89 75.55
Water Water Date	Water level

777. J. H. Neese. NW\( \frac{1}{2}\)SE\( \frac{1}{2}\) sec. 20, T. 6 N., R. 24 E. Water level, in feet below measuring point, 1940

Jan. 27 30.57 May 20 30.97 Sept.22 30.78 Mar. 21 30.69 July 26 30.77 Nov. 22 30.97

### Blaime County

1. Oklahoma City Water Department observation well E. NE sec. 27, T. 16 N., R. 12 W., on flood plain of North Canadian River, 200 feet east of channel on south side of bridge, 2.5 miles west of Watonga on U. S. Highway 270. Jetted well, depth 10.7 feet, diameter 2 inches. Measuring point, top of pipe, 2 feet above land surface, and 15.95 feet below bench mark, which is cross chiseled on top of northeast corner of eastern concrete abutment of bridge, 1491.05 feet above sea level.

Water level, in feet below measuring point, 1939-40 Dec. 15, 1939 Jan. 12, 1940 Mar. June 23, 1940 7.48 9.90 2, 1940 9.30 9.70 9.58 9.45 8.24 2 9.60 Apr. Aug. 9 Feb. May Q Nov. 20 9.75 24 20 9.25 7.98

2. Oklahoma City Water Department observation well F. Near NE corsec. 9, T. 18 N., R. 13 W., on flood plain of North Canadian River, 20 feet southwest of channel on southeast side of bridge in northeast corner of Canton. Jetted well, depth 10.9 feet, diameter 2 inches. Measuring point, top of pipe, 1.4 feet above land surface, and 5.68 feet below bench mark of U. S. Army Engineers which is in top of south side of east pier of bridge.

Water level, in feet below measuring point, 1939-40 Dec. 15, 1939 10.80 Mar. 2, 1940 Apr. 2 9.90 June 23, 1940 7.66 10.50 Jan. 12, 1940 9 10.15 Aug. 9.60 Feb. 4 May 10,21 Nov. 20 10.42 24 9.90

## Canadian County

1. Oklahoma City Water Department observation well A. SW\(\frac{1}{4}\) sec. 4, T. 12 N., R. 5 W., on flood plain of North Canadian River, 10 feet south of south end of Piedmont Bridge, 2 miles north of Yukon. Jetted well, depth 17.5 feet, diameter 2 inches. Measuring point, top of pipe, 0.6 foot above land surface and 2.31 feet above bench mark, which is cross chiseled in top of east center concrete pier of bridge, 1250.29 feet above sea level. Measurements from Dec. 15, 1939, through Apr. 1, 1940, were made in a similar well, 8.6 feet in depth, in middle of river channel on downstream side of bridge. These measurements have been referred to the measuring point of the present well.

Water level, in feet below measuring point, 1939-40 11.9 May 20, 1940 Dec. 15, 1939 Mar. 2, 1940 10.7 (a) Jan. 12, 1940 10.4 Apr. 2 June 23 6.18 11.15 10.46 Feb. 4 12 10.1 Aug. 9.95 24 10.7 May 9 10.55 Nov. 20 10.5

a Dry.

### Canadian County -- Continued.

2. Oklahoma City Water Department observation well B. NW<sup>1</sup>/<sub>4</sub> sec. 33, T. 13 N., R. 7 W., on flood plain of North Canadian River under bridge 2 miles north of El Reno on U. S. Highway 81. Jetted well, depth 23 feet, diameter 2 inches. Measuring point, top of pipe, 0.7 foot above land surface and 16.92 feet below bench mark, which is cross chiseled in top of northwest wing wall of bridge, 5 feet west and 2.35 feet south of northwest corner of bridge. Bench mark, 1326.89 feet above sea level. Measurements from Dec. 15, 1939, through Apr. 1, 1940, and occasional measurements thereafter, were made in a similar well, 9.1 feet in depth, in river channel at south bank. These measurements have been referred to the measuring point of the present well.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 15, 1939 Jan. 12, 1940 Feb. 4 24 Mar. 2	17.62 16.77 17.05 13.37 (a)	Apr. 2, 1940 11 12 May 9	(a) 20.42 20.9 10.47	May 20, 1940 June 23 Aug. 9 Nov. 20	11.63 15.74 17.35 (b)

3. Oklahoma City Water Department observation well C. SW\[ SW\[ \] sec. 1, T. 13 N., R. 9 W., on flood plain of North Canadian River at southeast corner of bridge on county road 1.5 miles north of Calumet, 8 feet south of south bank of river and 8.8 feet above bottom of channel. Jetted well, depth 11 feet, diameter 2 inches. Measuring point, top of pipe, 1 foot above land surface and 9.16 feet below bench mark, which is bolt in northwest wing wall of bridge.

	Water level,	in feet	below	measuring	point,	1939-40	
Dec. 15, 1	939 10.30	Mar. 2.	1940	9.60	Мау	20, 1940	9.45
Jan. 12. 1	940 9.60	Apr. 2		9.60	June	23	8.07
Feb. 4	9.92	11		8.0	Aug.		9.95
24	9.30	May 9		9.30	Nov.	20	10.10

4. Oklahoma City Water Department observation well D. NW\(\frac{1}{2}\)NW\(\frac{1}{2}\) ecc. 16, T. 14 N., R. 10 W., on flood plain beside channel of North Canadian River, 50 feet west of east end of bridge 5 miles north and 2 miles east of Geary. Jetted well, depth 9.2 feet, diameter 2 inches. Measuring point, top of pipe, 0.7 foot above land surface and 7.5 feet below bench mark, which is hole in top of south end of eastern concrete pier of bridge.

	Water	level,	<u>i</u> n	feet	below	measuring	point,	1939-40	
Dec. 15, Jan. 12, Feb. 4		9.30 9.20 9.04 8.90	Apr	2 2 9 20	1940	9.20	June Aug. Nov.		7.70 9.05 (c)

#### Cimarron County

66. C. K. Womack. NW4SE4SE4 sec. 34, T. 1 N., R. 5 E. Water level, in feet below measuring point, 1940

						, +		
Jan.	22	83.95	May	25	83.94	Sept.	86	83.86
Mar.	26	83.94	July	22	83.91	Dec.	4	83.89

129. George Camilli. NE NE SE sec. 2, T. 2 N., R. 2 E. Water level, in feet below measuring point, 1940

	 	 	 <u> </u>	
Jan. Mar.	169.86 169.78		Sept.27 Nov. 25	169.78 169.74

- Dry; filled with sand to depth of 9.1 feet. Dry; filled with sand to depth of 17.2 feet. Dry; filled with sand to depth of 9 feet.

65

#### Cimarron County -- Continued.

148. T. A. Peters. SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>4</sub> sec. 5, T. 2 N., R. 5 E. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 22	25.11	May 25	24.95 `	Sept.26	25.57
Mar. 26	25.17	July 22	25.33	Dec. 4	25.69

153. Edmund B. Rogers. SE\(\frac{1}{2}\)SE\(\frac{1}{4}\) sec. 32, T. 2 N., R. 5 E.
Water level, in feet below measuring point, 1940

	 ,		, , , , , , , , , , , , , , , , , , , ,	
Jan. 22	May 25	97.36	Sept.26	97.29
Mar. 26	July 22	97.35	Dec. 4	97.33

219. E. R. Morse. SW\(\frac{1}{2}\)SW\(\frac{1}{4}\)Swc. 9, T. 3 N., R. 1 E.

Water level, in feet below measuring point, 1940

Jan. 22 177.87 May 27 177.95 Sept.27 (a)

Mar. 27 177.80 July 22 177.90

223. E. C. Jones.  $SE_{2}^{\frac{1}{2}NE_{2}^{\frac{1}{2}NE_{2}^{\frac{1}{2}}}$  sec. 19, T. 3 N., R. 1 E. Water levels, in feet below measuring point, 1940: Mar. 27, 142.00; Sept. 27, 142.95; Nov. 25, 142.15.

224. Walter R. Wood. NE SE SE SE sec. 15, T. 3 N., R. 1 E.

	MEDGT. TOAGT	THI TOOL DO	TOM MOSSULTING DOT	10, 10 10
Jan. 22	140.32	May 27	140.25 Sep	t.27 140.14
Mar. 27		July 22	140.33 Nov	. 25 140.00

237. Central Life Assurance Society.  $NE_{2}^{1}NE_{4}^{1}NE_{4}^{1}$  sec. 36, T. 3 N., R. 1 E.

 Water level, in feet below measuring point, 1940

 Jan. 22
 67.10
 May 27
 67.06
 Sept.27
 66.75

 Mar. 27
 66.96
 July 22
 66.80
 Nov. 25
 66.60

240. J. E. Benson.  $SE_{4}^{1}SW_{4}^{1}Sw_{4}^{1}$  sec. 8, T. 3 N., R. 2 E. Water levels, in feet below measuring point, 1940: Jan. 22, 159.70; Sept. 27, 159.56.

262. H. W. and Z. B. Stone.  $SE_{4}^{1}SE_{4}^{1}SW_{4}^{1}$  sec. 12, T. 3 N., R. 4 E. Water levels, in feet below measuring point, 1940: Mar. 27, 181.92; May 25, 181.97.

263. John Ohnick, Jr. SE<sup>1</sup><sub>2</sub>SW<sup>1</sup><sub>2</sub>SW<sup>1</sup><sub>4</sub> sec. 15, T. 3 N., R. 4 E.

	HECAT. TAAAT	, III 100L	nerow measuring	pornr, 1940	
Jan. 22	128.71	May 25	128.69	Sept.26	128.63
Mar. 27	128.72	July 22	128.70	Nov. 25	128.60

274. C. Rollins.  $NE_{2}^{1}SE_{2}^{1}SE_{3}$  sec. 8, T. 3 N., R. 5 E. Measurements discontinued.

275. O. A. Showalter.  $SW_2^1NW_2^1NW_4^2$  sec. 11, T. 3 N., R. 5 E. Measuring point, 0.88 foot below bench mark and 0.27 foot above original measuring point.

Water level, in feet below original measuring point, 1940

Jan. 22 146.40 May 24 146.35 Sept.26 146.41

Mar. 26 146.36 July 22 146.38 Nov. 26 146.47

276. Atchison, Topeka, and Santa Fe Railroad.  $NW_{\frac{1}{2}}SW_{\frac{1}{2}}$  sec. 14, T. 3 N., R. 5 E.

	Marel TeAeT	, in reet	perow measuring	point, 1940	
Jan. 22	133.70	May 25	133.72	Sept.26	133.76
Mar. 26	133.67	July 22		Nov. 26	133.85

a Caved in; measurements discontinued.

#### Cimarron County -- Continued.

282. Minnie Cook. NE4NW4NW4 sec. 20, T. 3 N., R. 5 E. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 22	159.83	May 25	159.85	Sept.26	159.74
Mar. 26	159.77	July 22	159.83	Dec. 4	159.87

309. Mrs. Wesley Burch.  $NW_{1}^{1}NW_{1}^{1}NW_{2}^{1}$  sec. 3, T. 3 N., R. 7 E. Measurements discontinued after May because well was fitted with a sanitary seal. Altitude of measuring point used in March and May may have differed from original by a few hundredths of a foot. Water levels, in feet below measuring point, 1940: Jan. 24, 72.70; Mar. 25, 72.50; May 24, 72.36.

313. E. J. Behrendt.  $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$  sec. 9, T. 3 N., R. 7 E.

	Water level	, in feet below	w measuring point, 1940	
Jan. 23	a 46.87	May 24	46.98 Sept.26	a 47.22
Mar. 25	a 46.80	July 23	47.20 Dec. 4	a 47.35

328. L. G. Miles.  $SE_{2}^{1}SE_{2}^{1}NE_{2}^{1}$  sec. 7, T. 3 N., R. 8 E. No measurements made in 1940.

338. Federal Land Bank. SW\(\frac{1}{2}\)SE\(\frac{1}{4}\)NE\(\frac{1}{4}\) sec. 14, T. 3 N., R. 9 E.

	Water level	, in feet	below measuring	point, 1940	
Jan. 24	183.77			Sept.25	183.81
Mar. 25	183.32	July 23	183.54	Dec. 4	183.48

384. R. A. Godown.  $NW_{\frac{1}{4}}NW_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 13, T. 4 N., R. 5 E. Water level, in feet below measuring point, 1940: Jan. 23, 155.35. Measurements discontinued.

387. F. M. Tudor.  $SE_2^{1}SW_2^{1}SE_2^{1}$  sec. 28, T. 4 N., R. 5 E. Well was put in service in 1940, and measuring point was shifted several times during repair operations. On Nov. 26 it was 0.50 foot below the bench mark and 0.07 foot below the original measuring point.

	Water level	., in feet	below measuring	point, 1940	
Mar. 27 May 25		July 22 Sept.26	b 169.96 b 169.92	Nov. 26	170.10

398. Central Life Assurance Society.  $SE_{4}^{1}SW_{4}^{1}SW_{4}^{1}$  sec. 24, T. 4 N., R. 6 E.

	Mater TeAeT	, in reet	perom measuring	point, 1940	
Jan. 23 Mar. 26	113.18 113.03		112.95 112.98	Sept.26	112.90

415. A. E. Buck.  $NW_4^2SW_4^2$  sec. 23, T. 4 N., R. 7 E. Willowbar Lake was very low in March, and was dry through the rest of the year.

	Water level	, in feet	below measuring	point, 1940	
Jan. 23		May 24	75.85	Sept.26	75.86
Mar. 26	75.87	July 23	75.81	Dec. 4	75.82

418. T. F. Phillips. NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\) sec. 29, T. 4 N., R. 7 E.

Water level, in feet below measuring point, 1940.

	HEADT TOAGT	, III I GGC DG.	TOM Measuring borne, 194	·
Jan. 23 Mar. 26		May 24 July 23	111.55 Sept.26 112.44 Nov. 26	112.51

435. B. J. Wiggins. SW\(\frac{1}{2}\)SW\(\frac{1}\)SW\(\frac{1}\)SW\(\frac{1}{2}\)SW\(\frac{1}\)SW\(\frac{1}\)SW\(\frac{1}\)SW\(\frac{1}\)SW\(\frac{1}\)SW\(\frac{1}\)SW\(\frac{

		,	DOTON MONDUTINE	pozne, roz	·
Jan. 23	138.27	Mon 94	137 70	Sept.25	138,48
			TO1.10	ემტი•აი	700.40
Mar. 24	138.00	July 23	137 99	Nov. 26	138.34
		- vary 20	101.00	MOV. NO	100,04

a Adjacent pond dry,
b Altitude of measuring point unknown; possible error may be a few
hundredths of a foot.

# Cimarron County--Continued.

436. Mrs. S. C. Cantrell. NElnElnEl sec. 32, T. 4 N., R. 8 E.
Weter level in feet below measuring point, 1940

	METAT. TOACT	THE LOOP DOTO	* Thompas were	, pounts, my	
Date	Water level	Date	Water level	Date	Water level
Jan. 23 Mar. 25	153.76 152.68	May 24 July 23	153.38 152.58	Sept.25 Nov. 26	152 <b>.63</b> 151 <b>.</b> 81

500. Dan Eiland, Sr. SE sec. 12, T. 5 N., R. 4 E, on flood plain of Cimarron River. Dug well, depth 26 feet, diameter 10g inches. Used weekly in summer for irrigation of 1-acre garden. Measuring point, edge of casing on northeast side, 2 feet below land surface and 2.61 feet below bench mark, which is spike driven vertically in northwest side of 6-inch cottonwood tree 24 feet northwest of well. Water level, in feet below measuring point, 1940: Nov. 26, 9.27.

506. Bernard N. North. Sassa sec. 4, T. 5 N., R. 5 E. (revised location). The measuring point used in 1940 was temporary because of work on the well, but it probably was within a few hundredths of a foot of the level of the original point. After May the well caved in. Water levels, in feet below measuring point, 1940: Jan. 23, 13.41; Mar. 26, 15.08; May 25, 13.04.

516. State of Oklahoma. SE<sup>1</sup>/<sub>2</sub> sec. 34, T. 5 N., R. 5 E. Oil drum used as well cover and measuring point was knocked over prior to the July measurement. It was replaced in temporary position for that measurement, but was disturbed again before the altitude of the measuring point could be determined. As replaced early in August, the measuring point was 3.06 feet below the bench mark and 0.80 foot below original measuring point.

 Water level, in feet below original measuring point, 1940

 Jan. 23
 8.58
 May 25
 7.83
 Sept.26
 8.00

 Mar. 26
 7.88
 July 22
 a 8.90
 Nov. 26
 11.95

528. Alliance Insurance Co. NW1 sec. 4, T. 5 N., R. 7 E. Water levels, in feet below measuring point, 1940: Mar. 26, 20.48; Dec. 4, 20.15.

610. Mrs. L. K. Bangerter. SWANEANEL sec. 21, T. 6 N., R. 5 E. Water level, in feet below measuring point, 1940

	 , 222 2000	BOTON WONDERT THE	pozzio, rozo	
Jan. 23 Mar. 26	May 25 July 22		Sept.26 Nov. 26	29.59 30.86

### Cleveland County

1. B. B. Leverich. NW1SW1 sec. 28, T. 10 N., R. 3 W. Water levels for 1939, reported in terms of feet above a datum in Water-Supply Paper 886, are repeated here in feet below measuring point.

	Water	level,	in fee	t below	measuring	point,	1939-	40
Mar. 31,	1939	15,29	Feb.	17, 194	0 16.80	June	24. 1	940 16.93
May 29		16.03		24	16.42	1	30	16.81
June 7		15.58	Mar.	2	15.72	July		16.26
Sept.12		15.05		9	16.05		6 13	16.16
21		15.28		16	16.06	1	20	15.96
Oct. 16		16.15	1	23	16.61	1	27	15.83
21		15.47	1	30	16,58	Aug.	3	15.98
28		16.09	Apr.	2	16.70		8	15.95
Nov. 4		16.24	]	10	16.96	Sept	.15	15.93
14		15.77	1	13	16.88	Oct.	9	16.60
Jan. 13,	1940	16.07	1	20	16.25	Nov.	27	15.78
20		16.52		27	16.86	Dec.	7	15.16
27		16.56	May	4	16.17	""	16	15.10
Feb. 3		17.08	1	11	16.15	1	23	14.71
10		16.60	June	21	17.03			

a Temporary measuring point.

### Harper County

1. E. W. Johnson. NW\(\frac{1}{2}\)NW\(\frac{1}\)NW\(\frac{1}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac{1

## Major County

1. Oklahoma City Water Department observation well G. NW\(\frac{1}{4}\)NW\(\frac{1}{4}\) sec. 28, T. 20 N., R. 16 W., on flood plain of North Canadian River on east side of bridge on State Highway 14 north of Seiling. Jetted well, depth 9.8 feet, diameter 2 inches. Measuring point, top of pipe, 2.7 feet above land surface and 9.65 feet below bench mark, which is cross chiseled on southwest wing wall of bridge.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 15, 19 Jan. 12, 19 Feb. 4		Mar. 2, 1940 Apr. 2 May 9 20	7.58 8.05 7.54 a 3.93	June 23, 1940 Aug. 9 Nov. 20	6.46 9.95 (b)

#### PAYNE COUNTY

#### STILLWATER CREEK AREA OF SOIL CONSERVATION SERVICE

The observation-well program in the Stillwater Creek area, 5/near Stillwater, Payne County, Okla., was continued through the first half of 1940 by the Soil Conservation Service under the direction of Albert E. Wade, acting technician in charge. The water-level measurements during this part of the year were made by J. Frank Relf, associate agricultural engineer. The Soil Conservation Service, however, was unable to continue the work after July 1 because of reduction in personnel at Stillwater, and the responsibility for the work was assumed by Dr. H. J. Harper, of the Department of Agronomy of Oklahoma Agricultural and Mechanical College. The water-level measurements in the last half of the year were made by Dr. M. J. Plice, also of the Department of Agronomy. In 1940 he and Mr. Relf made 169 water-level measurements in 14 observation wells in the area.

The water levels for the Stillwater area are given in feet above assumed datum planes that were established 10 feet below the water level in each well on January 1, 1935. The average water levels usually are computed from the measurements made in 12 wells (1-4, 7-9, 11-13, 15, and 17), but at times have been more or less irregular because of the omission

a River in flood. b Dry; filled with sand to depth of 8.25 feet. 5/ See Water-Supply Papers 777,817, 840, 845, and 886.

OKLAHOMA 69

of wells in use or wells temporarily dry. Several irregularities occur in the averages for 1940 because well 8 was in use throughout the year, well 9 was in use from July through December, and well 11 was dry except in June. August, November and December.

## Fluctuations of Water Level, 1934-40

From June 1934 through 1940 the average water levels for the observation wells in the Stillwater Creek Basin have been characterized by prompt fluctuations in response to periods of heavy precipitation. They have also shown the effects of general trends in precipitation. The precipitation in the area was generally below the normal from early 1936 until early 1938, and the average water level declined persistently in response to the accumulating deficiency in precipitation. The annual lowest water level has occurred in the fall or winter, but the annual highest water level has occurred on various dates because of the temporary influence of heavy storms.

Yearly highest and lowest average water levels in observation wells, 1935-40

Year	Date of highest water level	Date of lowest water level
1935	July 1	December 2
1936	February 3	September 21
1937	April 5 and June 21	November 22
1938	March 28	January 31
1939	May 24	October 11
1940	December 28	September 26

On June 2, 1934, when the measurements were begun, the average water level was 10.77 feet above assumed datum planes. It declined until August 26-31, reaching the level of 8.74 feet, and then rose to the record high level of 11.80 feet on July 1, 1935. Thereafter the average water level declined, at first rapidly until October 1935 and then more slowly through 1936 and 1937, until it reached 6.98 feet on January 31, 1938. From this level it rose slowly to 8.92 feet on June 27, 1938, declined to 7.65 feet on March 1, 1939, and then rose to 8.32 feet on May 24, 1939. Drought through the summer of 1939 caused a decline to 6.62 feet on October 11, the second lowest level recorded, but the water level rose somewhat toward the end of 1939. In the first 8 months of 1940 there were several fluctuations in the average water level, without a significant general trend, followed by a decline to the lowest recorded level--6.50 feet on September 6.

Thereafter the water level rose steadily in response to unusually heavy fall precipitation, and reached 7.57 feet, the high level for the year, on December 28.

Water	levels,	in	feet	above	datum	planes,	1940

Date	1	2	3	4	5	7	8	9
Jan. 1	7.10	7.93	3.12	6.56	• • • •	5.97	a 5.69	7.87
Feb. 3	7.07	7.75	3.09	6.50		5.91	a 4.19	7.38
26	7.31	8.11	3.21	6.44		5.93	a 2.60	7.07
Mar. 29-30	7.45	8.34	2.89	6.32		5.88	a 5.93	6.16
Apr. 29-30	7.97	9.58	3.04	6.32	8.68	6.28	a 6.13	6.08
May 27-28	8.30	9.31	3.24	6.29	8.57	6.29	a 0.01	6.28
June 26-27	7.98	9.43	3.47	6.29	8.59	6.28	a 2.93	6.68
July 26	7.62	9.35	3.49	6.26	8.59	5.53	a 0.30	a 0.48
Aug. 26-27		9.08	3.51	6.23	9.02	5.56	a-6.52	a 1.49
Sept 26	7.11	9.23	3.28	6.27	8.72	5.30	a-1.21	a 3.92
Oct. 26	6.98	8.99	3.12	6.39	8.73	5.04	a 2.40	a 3.32
Nov. 29	8.33	10.27	3.14	6.51	13.25	5.22	a 5.27	a 5.99
Dec. 28	9.76	11.85	3.33	6.48	12.87	5.44	a 3.08	a 7.77

Water levels, in feet above datum planes, 1940

Date	11	12	13	15	16	17	Average
Jan. 1	(ъ)	7.56	7.39	8.32	9.20	9.02	7.08
Feb. 3	(p)	7.40	7.42	8.67	8.95	8.95 9.08	7.01 7.09
26 Mar. 29-30	(ъ)	7.35 7.21	7.48 7.20	8.88 8.43	9.01 8.76	9.08	6.91
Apr. 29-30	(B)	8.03	7.24	8.45	9.94	10.24	7.32
May 27-28	(ď)	7.74	7.06	8.40	9.15	10.46	7.34
June 26-27	3.28	7.99	7.28	8.69	9.05	10.27	7.06
July 26	(b)	7.69	7.23	8.54	9.06	9.83	c 7.28
Aug. 26-27	3,49	7.41	7.27	8.61	9.15	9.32	c 6.81
Sept.26	(b)	7.10	6.95	8.11	9.07	5.17	c 6.50
Oct. 26	(P)	6.95	7.04	8.37	9.13	8.84	c 6.86
Nov. 29	3.57	7.15	7.23	8.41	11.32	10.12	c 6.99
Dec. 28	4.19	8.41	7.10	8.35	9.59	10.76	c 7.57

## Texas County

40. August Lorenz. NE NW 4 sec. 6, T. 3 N., R. 17 E.
Water level, in feet below measuring point. 1940

		### 1000 BOTC	M THOUBATTIE	Dorne, 1940	
Date	Water level	Date	Water level	Date	Water level
Jan. 26 Mar. 22	91.11 91.11	May 22 July 25	91.23 91.17	Sept.23 Nov. 23	91.16 91.31

60. J. E. Friesen.  $SW_4^1NW_4^1$  sec. 3, T. 3 N., R. 18 E. No measurements made in 1940.

72. William L. Ziegler.  $SW_4^1NW_4^1$  sec. 33, T. 4 N., R. 14 E. No measurements made in 1940.

85. George Dean. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 4 N., R. 11 E. Adjacent lake was dry at all times when measurements were made.

Marel Teae	r, in lest perov	measuring point, 1940	
Jan. 24 42.39	May 24	42.53 Sept.25	42.33
Mar. 25 42.43	July 23	42.21 Dec. 4	42.37

a In use. b Dry. c Well 9 omitted.

## Texas County -- Continued.

120. Joe Gribble.  $NE_2^4NE_4^1$  sec. 2, T. 5 N., R. 14 E. Water levels, in feet below measuring point, 1940: Jan. 25, 196.36; Sept. 24, 196.33.

125. J. Donald Hughes.  $SW_{\frac{1}{2}}SE_{\frac{1}{2}}SW_{\frac{1}{2}}$  sec. 13, T. 1 N., R. 18 E. Walevels, in feet below measuring point, 1940: Mar. 20, 1.98; Nov. 23, 3.00.

130. Robert Johnson.  $SE_2^1NW_2^1$  sec. 7, T. 1 N., R. 19 E. Water levels, in feet below measuring point, 1940: Mar. 20, 2.77; Nov. 23,

138. Joe Sutton. SwisEi sec. 6, T. 1 N., R. 19 E. Measuring point 0.32 foot lower than in 1939 because top ring of concrete casing was destroyed. Water levels, in feet below original measuring point, 1940: Mar. 20, 2.08; Nov. 23, 3.02.

167. Owner unknown. SW1SE1SE1 sec. 34, T. 2 N., R. 12 E.

		Water level	, in feet	below measuring	point, 1940	)
Date		Water level	Date	Water level	Date	Water level
Jan. Mar.		190.59 190.59	May 23 July 24	190.68 190. <b>4</b> 0	Sept.25 Dec. 5	190.80 190.50
	172.	Owner unknown Water level		NE½ sec. 25, T. below measuring		
Jan. Mar.		120.65 120.68	May 23 July 24	121.32 121.72	Sept.24 Nov. 23	122.00 121.72
	176.			Ni sec. 18, T. 3 below measuring		
Jan. Mar.		2.35 1.94	May 22 July 24	0,69 3,05	Sept.24 Dec. 4	2.92 2.36
sec.	182. <b>34</b> , 7	r. 2 N., R. 13	E.	and Mechanical below measuring		e <del>i</del> neisei
Jan. Mar.		137.84 a 137.86	May 23 July 24	b 138.87 c 141.35	Sept.24 Nov. 23	d 141.66 a 140.46
	187.			. 12, T. 3 N., I below measuring		)
Jan. Mar.		5.06 <b>4.</b> 78	May 22 July 25	4.32 5.63	Sept.24 Nov. 23	5.29 4.91
	188.			. 1, T. 2 N., R		
Jan. Mar.		125.04 125.03	May 22 July 24	124.98 124.75	Sept.24 Dec. 5	124.90 124.89
	270.			sec. 7, T. 3 N. below measuring		)
Jan. Mar.		73.76 73.13	May 24 July 23	73.21 72.80	Sept.25 Dec. 4	72.79 72.84
	284.		. NE¦NE¦ , in feet	NE dec. 5, T. 3	N., R. 12 F point, 1940	i. )
Jan. Mar.		102.44 102.37	May 24 July 23	102.39 102.36	Sept.25 Nov. 27	102.40 102.43

- a Southern town well pumping.
  b Southern town well idle; northern town well shut off 1 hour;
  campus irrigation well shut off 2 hours.
  - c Both town wells and campus irrigation well pumping. d Southern town well and campus irrigation well pumping.

Mar. 22

a 11.47

#### Texas County -- Continued.

286. William Webb. SW4SW4 sec. 9, T. 3 N., R. 12 E. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 24 Mar. 25	23.85 23.82	May 24 Sept.25	20.42 23.32	Dec. 4	23.89

294. Stonebraker-Zea ranch.  $NW_{\frac{1}{2}}NW_{\frac{1}{2}}$  sec. 25, T. 3 N., R. 13 E. Water levels, in feet below measuring point, 1940: Mar. 25, 43.07; May 24, 43.11; July 24, 43.19; Dec. 5, 43.29. R. 13 E.

295. E. O. Hobson. SW4NW2 sec. 14, T. 3 N., R. 15 E. Water level, in feet below measuring point, 1940 Jan. 26 11.72 May 22 b 10.87 Sept.24

July 25

Henry Behne. NEINEINEI sec. 5, T. 3 N., R. 14 E. Measurements discontinued.

c 11.67

Nov. 23

d 12.19

e 11.68

Charles Roust. SE4SE4SE4 sec. 5, T. 3 N., R. 14 E. 308. Water level, in feet below measuring point, 1940 May 23 Jan. 24 69.80 69.80 Sept.25 69.86 July 23 Dec. 4 Mar. 25 69.80 69.81 69.83

Mrs. Bostwick.  $SW_{4}^{1}SE_{4}^{1}$  sec. 1, T. 3 N., R. 16 E. Water level, in feet below measuring point, 1940 Mar. 22 22.61 July 25 · 22.26 Nov. 23 22.91 22 May 22,43 Sept.24 22.64

 $SW_{4}^{1}SW_{4}^{1}$  sec. 2, T. 3 N., R. 16 E. in feet below measuring point, 1940 324. Anna Calvert. Water level Mar. 22 95.78 95.86 Nov. 23 July 25 95.91 Sept.27 95.90 May 22 95.85

325. Ensten.  $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$  sec. 2, T. 3 N., R. 16 E. Water level, in feet below measuring point, 1940 105.31 May 22 Jan. 26 105.35 Sept.24 105.45 Mar. 22 105.18 July 25 105.35 Nov. 23 105.45

Owner unknown.  $SW_{4}^{\frac{1}{2}}SE_{4}^{\frac{1}{2}}$  sec. 17, T. 3 N., R. 15 E. 332. Water level, in feet below measuring point, 1940 May 22 Jan. 25 69.90 68.82 Sept.24 69.62 Mar. 22 July 24 69.27 69.30 Nov. 23

350. C. A. Nash.  $NW_{4}^{\frac{1}{2}}NW_{4}^{\frac{1}{2}}$  sec. 18, T. 3 N., R. 16 E. Water lein feet below measuring point, 1940: Mar. 23, 2.65; May 23, 2.50; July 25, 4.05; Sept. 25, 3.51. Water levels,

354. A. M. Fankhauser.  $SE_2^1SW_4^1$  sec. 27, T. 6 N., R. 15 E. Water level, in feet below measuring point, 1940: Dec. 5, 148.78.

Frank Roten.  $SE_{\frac{1}{4}}SE_{\frac{1}{4}}$  sec. 3, T. 2 N., R. 14 E.

Water level, in feet below measuring point, 1940 Jan. 102.02 May 22 101.94 Sept.24 101.86 Mar. Dec. 102.02 July 24 102.03 101.98 - 5

- Last pumped 8 hours prior to measurement.

  Last pumped 7½ hours prior to measurement.

  Last pumped (25 gallons) ½ hour prior to measurement.

  Last pumped 2½ hours prior to measurement.

  Last pumped 1 hour prior to measurement.
- đ

## Texas County -- Continued.

399. Andrew Bender. NEISE sec. 26. T. 2 N., R. 14 E. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 26 Mar. 23	127.66 127.58	May 25 July 24	127.60 127.53	Sept.24	127.56

- 404. Everett J. Ritter.  $NW_4^1NE_4^1$  sec. 4, T. 1 N., R. 14 E. Water levels, in feet below measuring point, 1940: Mar. 25, 166.95; May 25, 166.95 (windmill shut off 12 hours); Sept. 24, 166.96; Dec. 5, 166.80 (windmill shut off 22 hours).
- 436. Leo Holtgraver.  $NE_{\pi}^{1}NE_{\pi}^{1}$  sec. 24, T. 4 N., R. 14 E. Water levels, in feet below measuring point, 1940: Mar. 25, 171.66; May 25, 171.10; Dec. 5, 170.95.
- 446. Owner unknown. NW $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 4 N., R. 15 E. pond was dry at all times when measurements were made.

Water level, in feet below measuring point, 1940 149.42 Jan. 25 149.35 May 25 150.31 Sept.24 Mar. 23 149.38 July 24 149.34 Dec. 5 149.38

Owner unknown. NEINWI sec. 21, T. 1 N., R. 14 E. No measure-459. ments made in 1940.

461. Owner unknown. NW NW sec. 31, T. 1 N., R. 14 E. Water level, in feet below measuring point, 1940

Jan. 191.78 191.76 May 25 191.81 25 Sept.25 191.96 Mar. 25 July 25 191.73 191.71 Dec. 5

J. E. Friesen. SELSELSEL sec. 34, T. 4 N., R. 18 E. Water level, in feet below measuring point, 1940

Mar. 102.13 Nov. 25 22 102.08 July 25 102.36 22 May 102.25 Sept.25 102.09

497. R. M. Van Hyning. NW 1NW 1SW 1 sec. 21, T. 4 N., R. 19 E. Water level, in feet below measuring point, 1940 July 25 Sept.25 Mar. 104.38 22 104.28 Nov. 22 104.27 22 May 104.37 104.25

507. J. H. Wells.  $SE_2^1SW_4^1$  sec. 1, T. 4 N., R. 14 E. Water levels, low measuring point, 1940: Jan. 25, 165.74; May 23, 165.75; in feet below July 24, 165.78.

Owner unknown. NEINE sec. 26, T. 5 N., R. 14 E. 530. Water level, in feet below measuring point, 1940

Jan. 25 178.35 May 178.54/ 178.42 Sept.24 Mar. 23 178.46 July 24 178.35 178.33 Dec. 5

Owner unknown.  $SW_{4}^{1}SW_{4}^{1}$  sec. 19, T. 4 N., R. 15 E. Water level, in feet below measuring point, 1940

Jan. May 24 24 146.50 146.23 Sept.25 146.58 July 23 Mar. 25 146.43 146.24 Dec. 4 146.16

552. B. G. Manwarren.  $NE_4^1NE_4^1$  sec. 1, T. 3 N., R. 12 E. Water level, in feet below measuring point, 1940: Dec. 4, 178.22.

589. August Lorenz. NW1NW1 sec. 54, T. 4 N., R. 17 E. Water level, in feet below measuring point, 1940

Jan. 26 120.17 May 22 120,17 120.20 Nov. 23 Mar. 22 120.11 Sept.25 120.11

## Texas County -- Continued.

618. Owner unknown. NW1NW1 sec. 11, T. 3 N., R. 10 E. Measurements discontinued.

621. Owner unknown. NW1NW1 sec. 2, T. 3 N., R. 10 E.
Water level. in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 24	151.30	May 24	150.87	Sept.25	151.18
Mar. 25	150.93	July 23	151.00	Dec. 4	150.85

626. John Copeland.  $SW_{2}^{1}NW_{2}^{1}$  sec. 27, T. 4 N., R. 10 E. Water levels, in feet below measuring point, 1940: Jan. 24, 90.74; Mar. 25, 90.96; Sept. 25, 91.14; Dec. 4, 90.46.

661. William Webb.  $SE_4^1NE_4^1$  sec. 8, T. 3 N., R. 12 E. Measurements discontinued.

761. Federal Life Insurance Co., Chicago. NW 1NW 2 sec. 7, T. 3 N., R. 19 E.

Weter level in fact below measuring point 1940

	MECAL TAAAT	, III 1960	DATOM WRESSTITUR	DOTUC TATO	
Jan. 26	108.36		107.61	Sept.23	107.56
Mar. 22	107.38		107.48	Nov. 23	107.92

765. 0. Jolliff. SW2 sec. 26, T. 3 N., R. 19 E. Measuring point altered following the July measurement; in November it was 4.13 feet above bench mark and 0.46 foot below its original level.

Water level, in feet below original measuring point, 1940

Mar. May		107.46 107.51	107.16 107.58	Nov. 22	107.78
	770.	A. C. DeHart. Water level.	 •	, R. 19 E.	

Jan. 26 123.94 May 22 123.86 Sept.23 123.63 Mar. 22 123.83 July 25 123.69 Nov. 23 123.82

795. Herman Zable. NW1SW1 sec. 30, T. 4 N., R. 18 E.
Water level, in feet below measuring point, 1940

Mar. 22 116.75 May 25 116.73 Nov. 25 116.83

May 22 116.83 Sept.23 116.74

842. C. A. Rahm. NW1NE1 sec. 22, T. 6 N., R. 16 E.
Water level, in feet below measuring point, 1940

Jan. 25 124.40 May 23 124.38 Sept.24 124.57

Mar. 23 124.38 July 24 124.41 Dec. 5 124.56

#### Woodward County

1. Oklahoma City Water Department observation well H. NEINWI sec. 8, T. 20 N., R. 17 W., on flood plain of North Canadian River, 15 feet northeast of channel on south side of bridge on county road 3 miles north and 0.25 mile east of Richmond. Jetted well, depth 9.4 feet, diameter 2 inches. Measuring point, top of pipe, 2.2 feet above land surface and 8.7 feet below bench mark, which is 60-penny spike in 52-inch tree at northeast end of bridge.

Water level, in feet below measuring point, 1939-40 May 20, 1940 June 23 Dec. 15, 1939 Jan. 12, 1940 10.30 9.00 5.88 6.79 Feb. 24, 1940 7.80 8.30 Apr. 2 Feb. 4 May 7.84 8.87 9 Nov. 20 8.96 OKLAHOMA 75

## Woodward County -- Continued.

2. Oklahoma City Water Department observation well I. NEINE sec. 25, T. 23 N., R. 21 W., on flood plain of North Canadian River beside south bank of channel, on east side of bridge in northern part of Woodward. Jetted well, depth 9.4 feet, diameter 2 inches. Measuring point, top of pipe, 5.2 feet above land surface and 8.3 feet above bench mark, which is zero level of U. S. Army Engineers river gage, 1867.4 feet above sea level.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 15, 1939	8.90	Feb. 24, 1940	7.75	May 20, 1940	6.25
Jan. 1, 1940	8.40	Apr. 2	7.13	June 23	7.20
Feb. 4	8.16	May 9	8.35	Nov. 20	(a)

3. Western State Hospital, Supply. NEINE sec. 16, T. 24 N., R. 22 W., on flood plain of Wolf Creek about 2.5 miles upstream from its junction with North Canadian River. Drilled well, diameter 12 inches, depth 57 feet; used with 4 other wells for irrigation and as auxiliary to general hospital supply through summer. Well is second from the north. Measuring point, top edge of air-line hole in north side of base of pump, about level with land surface. Water level, in feet below measuring point, 1940: Nov. 27, 12.01 (1 week after termination of season of heavy pumping).

a Dry; filled with sand to depth of 6.25 feet.

#### STATE-WIDE PROJECT

## By R. W. Sundstrom

The ground-water resources of Texas have been under investigation since 1929 by the Federal Geological Survey in cooperation with the Texas State Board of Water Engineers. The measuring of water levels and artesian pressure in selected observation wells has constituted a part of this study. The earliest measurements were made in 1928 and 1929 in Dimmit, Zavala, Uvalde, and Medina Counties, and in 1930 and 1931 in the Houston-Galveston area. As the ground-water investigations were extended to other areas, the water-level observation program was expanded accordingly. During 1941, a total of more than 7,000 water-level measurements was made in about 1,300 wells in 78 counties. Twenty-two water-stage recorders were maintained on wells for the purpose of securing continuous records of the fluctuations of water level in selected areas. In some parts of the State, water levels were measured at intervals of a month or less, but in most places they were made at intervals ranging from 3 to 12 months.

The water-level measurements made in connection with the program prior to 1940 are published in Water-Supply Papers 777, 817, 840, 845, and 886. During 1940, two mimeographed reports were issued; the first contains a discussion of water-level fluctuations in the Houston district from 1930 to 1940, and the second contains a discussion of the water-level fluctuations in the High Plains of Texas from 1934 to 1940.

#### BALCONES FAULT ZONE

Water-level observations in wells in the Balcones fault zone, which comprises parts of Bexar, Comal, Guadalupe, Hays, Kinney, Travis, Uvalde, Val Verde, and Williamson Counties, were started in 1929 in Uvalde and Medina Counties. In 1932, observations were begun in Bexar County, and in 1937 they were extended to include Kinney, Comal, Hays, Travis, Guadalupe, and Val Verde Counties. Most of the observation wells in the area tap the Edwards limestone, which is the source of the water discharged by the large springs of the Balcones fault zone. The public and industrial water supplies of several large towns, including

San Antonio, and most of the irrigation supply of Uvalde and Bexar Counties are obtained from the Edwards limestone. The water enters the limestone on the outcrop area along the Balcones escarpment and on the Edwards Plateau. The artesian head in many of the wells situated down the dip responds rather quickly to recharge from rains on the outcrop area.

In the San Antonio area a water-stage recorder has been maintained since the fall of 1932 on a well at Beverly Lodges (see accompanying illustration). The water level in the well is affected to some extent by changes in the rate of pumping in the San Antonio area. The larger fluctuations of the water level, however, are chiefly dependent on the amount of the precipitation on the outcrop of the Edwards limestone north of the well. It is apparent that although the well is several miles down the dip, the water level in it responds quickly to heavy rains on the outcrop. From 1932 to April 9, 1935, the accumulated deficiency from normal precipitation at San Antonio was large; the discharge from the Edwards reservoir exceeded the recharge and the water level in the well declined. During the period April 9 to June 15, 1935, the precipitation at San Antonio amounted to about 24 inches, and the water level in the Beverly Lodges well rose about 15 feet. The total precipitation from June 1935 to May 1936 was below normal, but moderately heavy rains occurred in September 1935 and March 1936 and during these months the water level in the well rose slightly. The net decline in the period was about 5 feet. During May, June, and July 1936, heavy rains, which amounted to more than 15 inches at San Antonio, returned the water level to the peak stage of 1935. During the remainder of 1936 the precipitation was slightly above normal and the water level in the well remained comparatively high. During 1937 and the early part of 1938 the total precipitation was somewhat above normal. Heavy rains in May and December 1937 and in April 1938 caused pronounced rises in the water level in the well. In May 1938 the water level was within 2 feet of the peak stages of 1935 and 1936. From May 1938 to October 1940 there was a large accumulated deficiency in the precipitation and the water level declined to its lowest observed stage. almost 20 feet below the peak stages of 1935 and 1936. Heavy rains in October, November, and December 1940 caused a sharp rise and in December 1940 the water level was about 8 feet lower than it was when the record was started in October 1932.

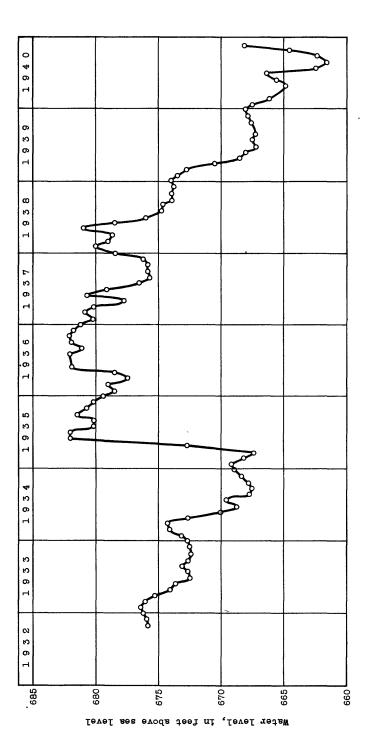


Figure 6.--Graph showing average monthly water level in Beverly Lodges well, San Antonio, Texas.

In 1939 a water-stage recorder was installed on a well at Brackettville in Kinney County. The two-year record shows the influence of precipitation on the water level in this well (see accompanying illustration).

Water levels in wells drawing from the Edwards limestone in Uvalde and Medina Counties are likewise affected by recharge from precipitation. In most of the wells the water levels were high during the first part of 1940, and then declined until they were affected by rains in April, May, and June, 1940. In some of the wells the highest water levels in 1940 occurred from May to July. After this period the water levels declined gradually to the end of the year, when they were mostly lower than at the beginning of the year.

#### SOUTHWEST TEXAS

Dimmit and Zavala Counties: The Winter Garden district.--Large scale pumping for irrigation in this area has been in progress for the past 21 years. The Carrizo sand, from which nearly all the water is derived, crops out in a belt about 1 to 7 miles wide extending across the western part of Dimmit County, the western and northern parts of Zavala County, and parts of eastern Maverick and southern Uvalde Counties. The sand is about 200 feet thick on the average, and it dips generally to the east and southeast. The belt in which it can be reached within a depth of 1,000 feet is about 15 miles wide. The water-level measurements in the area were started in 1929.

The water levels in wells on the outcrop area which are remote from heavy pumping show relatively little seasonal or yearly fluctuations, and have changed only slightly during the last 11 years. In areas down the dip where pumping has been heavy, the range of fluctuation of the water levels is large. The lowest stages were recorded late in the winter and in the spring of 1929-30 and 1931-32; the highest stages were recorded late in the summers of 1931, 1932, 1933, and 1940. The water levels in some of the wells in which the fluctuations of water level are the greatest rose 5 to 20 feet from August 1939 to August 1940. It is believed that these rises were due to the fact that there was less pumping for irrigation in 1939-40 than there was in 1938-39. The water levels in most of the wells were as high or higher in the summer of 1940 as in the summer of 1930.

## SOUTH TEXAS

Duval County.--Measurements of water levels in 38 wells reveal that there was an average rise of about 0.3 foot from April 1939 to February 1940. Twenty of the wells had an average rise of 1.64 feet during this period whereas 17 wells had an average decline of 1.28 feet. No change in water level occurred in one well.

Brooks County. -- A comparison of water-level measurements made in February 1940 with those made in January 1938 indicates that there has been a decline in the water levels in all except 2 observation wells in the county. The declines range from about 1.5 feet to about 17 feet and average about 5 feet.

Kleberg County. -- A decline in the water levels has occurred in Kleberg County from 1904 through 1940. In 1940 the net decline, however, was much less than in previous years, and in a few wells there were small rises of water level. The average net decline since 1935 in 16 observation wells has been slightly less than 4 feet.

#### SOUTHEAST TEXAS

Wharton County.--Large quantities of ground water are used in Wharton County for irrigating rice; considerable ground water is used also in connection with the operation of the sulphur and petroleum industries. According to records of the U.S. Department of Agriculture, 16,700 acres of rice were irrigated in 1935 and about 19,700 acres were irrigated in 1939. About 30,000 acre-feet of ground water was used for this irrigation in 1939. The sulphur industry used about 4,600 acre-feet; the public water supplies of Wharton, El Campo, and Boling used about 700 acre-feet. Although the records of water levels in the observation wells do not indicate that the decline was great, they show that the water levels in 13 wells declined an average of 1.1 feet from March 1939 to March 1940. The water levels in 3 wells rose in this period.

Jackson County.--The water levels in 18 wells in Jackson County had an average net decline of about 1.1 feet from the time measurements were begun in 1934 to December 1940. The declines range from a maximum of 4.7 feet to a minimum of 0.1 foot. The water level in 1 well showed a rise of 0.2 foot during this period. The average decline of the water levels in the 18 wells from March 1939 to March 1940 was 0.8 foot. From March 1940 to December 1940, the water levels in 9 wells rose an average of 0.8 foot whereas the water levels in 10 wells declined an average of 0.4 foot.

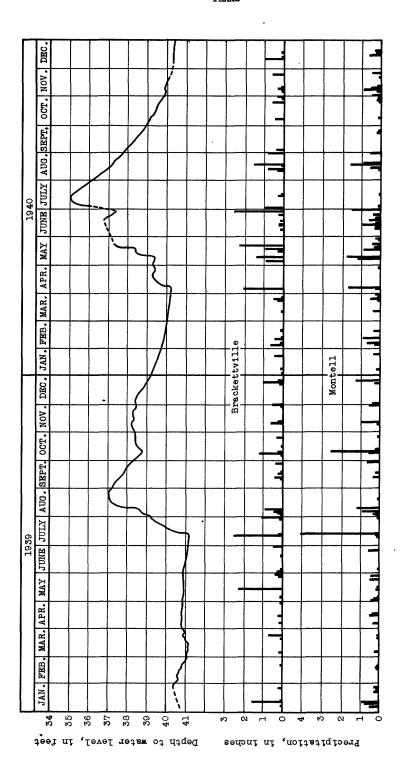


Figure 7. -- Graph showing fluctuations of water level in well 199 and daily precipitation at Montell and Brackettville, Texas.

Matagorda County. --Observations have been made on only four wells in southwestern Matagorda County. The water level in one of the wells (40), which is owned by the city of Palacios, has been affected by the pumpage from a nearby well that was drilled in 1938 and by pumpage for the irrigation of rice that began north of Palacios during 1939 and 1940. The water level in well 40 has declined about 16 feet since 1938. The water level in observation well 3, at Midfield, declined several feet in the same period.

Houston-Galveston and adjacent region. -- The water levels in the Houston area are chiefly influenced by heavy pumping. According to a report 1/recently issued, the average daily pumpage in the Houston, Pasadena, and Katy district increased from 63 million gallons in 1935 to 100 million gallons in 1937, to 112 million gallons in 1939, and to 126 million gallons in 1940. As a result the water levels in wells tapping sands from which this water is pumped have declined persistently throughout the period. The magnitude of the decline depends on the position of the observation well with respect to the centers of heavy pumping.

The water levels in the vicinity of Galveston continued to decline during 1940.

## EAST-CENTRAL AND EAST TEXAS

Water-level measurements were continued in 1940 in lines of wells extending from Austin northeast to the Texas-Louisiana boundary. The water levels in most of the shallow wells, which are quickly influenced by variations in precipitation were generally low when the measurements were made in April and July, but were much higher when measurements were made in November. The water levels in deeper wells, which do not respond quickly to variations in precipitation, were still at low stages in November. In the deep wells tapping the Carrizo sand, in Angelina and Nacogdoches Counties, the water levels declined during the year due to heavy pumping for industrial purposes in the vicinity of Lufkin. The amount of decline varied with the distance and location of the observation

<sup>1/</sup> White, W. N., Rose, N. A., and Guyton, W. F., Progress report on the ground-water resources of the Houston district, Texas (mimeographed report): Texas State Board of Water Engineers, Nov. 1940.

wells with respect to the centers of pumping. Well 169 at the Gulf Pipeline pumping station in Angelina County is believed to be influenced both by the pumping of the city of Lufkin well at Redlands about 3 miles away and of the paper mill wells about 4 miles away. The water level in well 169 declined 39 feet from April to November 1940.

#### HIGH PLAINS

The water levels in approximately 600 observation wells in the High Plains were measured during 1940. The measurements indicate that in the areas of heavy pumping for irrigation the net decline during the year was greater than it was in 1939. In areas beyong the influence of the heavy pumping, the fluctuations of water level were small. A detailed discussion of the changes in water level in the High Plains from 1934 through 1940 is given in a report by White, Broadhurst, and Lang.

## RECORDS OF WATER LEVEL

On the following pages the records of water level are expressed in feet with reference to the measuring point unless otherwise noted.

<sup>2/</sup>White, W. N., Broadhurst, W. L., and Lang, J. W., Ground water in the High Plains in Texas (mimeographed report): Texas State Board of Water Engineers, Dec. 1940.

#### Andrews County

Well numbers correspond to those in Water-Supply Papers 840, 845, and 886.

- 122. J. E. Parker,  $SE_{4}^{1}SE_{4}^{1}$  sec. 18, blk. A-46, P. S. L., 2 miles west of Andrews. Water levels, in feet below measuring point, 1940: Jan. 16, 111.40; July 31, 111.36; Nov. 22, 111.31.
  - 216. No measurement's made in 1940.
- 220. Mrs. Lela McQuatters. NW $\frac{1}{4}$  sec. 20, blk. A-34, P. S. L., ll.5 miles north of Andrews. Water levels, in feet below measuring point, 1940: Jan. 16, 78.58; Nov. 22, 78.86.

#### Angelina County

Well numbers correspond to those in Water-Supply Papers 840, 845, 849-A, and 886.

- 1. McKnight. In valley, 1.1 miles southeast of Cherokee County line, 1.2 miles southwest of Nacogdoches County line, 14.35 miles northwest of Lufkin. Unused drilled oil test, diameter 6 inches. Measuring point, top of casing, 2 feet above land surface. Flowing well. Water levels, in feet above measuring point, 1940: Apr. 9, well flowing; July 14, 12.3.
- 3. Earl Ash. South side of U. S. Highway 69, 15.25 miles northwest of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 9, 9.38; July 14, 9.49; Nov. 28, 4.74.
- 5. Town of Pollock. Four hundred feet south and 150 feet east of crossroads in Pollock, 11.25 miles northwest of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 9, 6.48; July 14, 8.05; Nov. 28, 5.24.
- 13. Miss N. Carson. Ten miles northwest of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 9, 7.90; July 14, 10.95; Nov. 28, 6.33.
  - 21. Caved. Measurements discontinued.
- 43. W. A. Collmorgan. Three and one-half miles north of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 7, 18.40; July 14, 27.25; Nov. 28, 38.24.
- 45. W. A. Collmorgan. Three and one-half miles north of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 7, 6.05; July 14, 7.14; Nov. 28, 6.06.
- 47. City of Lufkin. At city pumping plant, 2.5 miles north of Lufkin.

  Flow in gallons a minute, 1939-40

Date Flow		Date	Flow	Date	Flow
Feb. 9, 1939 May 8 July 20	4.0 6.0 1.3	Dec. 13, 1939 Apr. 7, 1940	0.4 6.0	July 14, 1940 Nov. 29	6.0 7.5

- 50. No measurements made in 1940.
- 53. J. W. Shearrand. On north side of U. S. Highway 69, 1.75 miles northwest of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 8, 10.45; July 14, 10.50; Nov. 28, 12.19.
- 56. Irwin Hopper. East of U. S. Highway 69, 6 miles north of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 8, 19.26; July 14, 18.77; Nov. 28, 19.22.
- 73. J. L. Bonner. About 300 yards south of old State Highway 94, just west of swampy lake, 11 miles south-southwest of Lufkin. Used drilled oil test, diameter 6 inches, depth 1,325 feet. Measuring point, top of casing, 2 feet above land surface. May 11, 1937, flowing; Apr. 8, 1940, flowing; July 15, 1940, flowing.

#### Angelina County -- Continued.

- 167. W. F. Athey. East side of U. S. Highway 59, 6.6 miles north of Lufkin. Water levels, in feet below measuring point, 1940: Apr. 7, 11.21; July 14, 11.03; Nov. 28, 4.76.
- 168. City of Lufkin. In brick pump house, about 300 feet west of Redland School, 2 blocks west of U. S. Highway 59 at Redland. Used drilled public supply well, diameter 16 inches, depth 1,170 feet, graveled wall and screen at 1,058 to 1,170 feet. Equipped with turbine pump. Measuring point, top of 1-inch pipe nipple in pump base, 1 foot above land surface. Water levels, in feet below measuring point, 1940: Feb., ab/140; Apr. 8, a/131; July 16, 144.09; Nov. 29, 153.59.
- 169. Gulf Pipe Line Co. At northwest corner of earth tank, about 300 feet west of pump station, 2.75 miles northwest of Redland. Used drilled industrial well, diameter 6 inches, depth 959 feet, screen at 820 to 848 feet. Measuring point, top of coupling on casing, 3 feet above land surface. Flowing well, equipped with centrifugal pump. Water levels, in feet above measuring point: Oct. 23, 1939, c/40; Apr. 8, 1940, c/20.5; July 14, 1940, c/14; Nov. 28, 1940, c/1.

#### Aransas County

- 35. W. S. Kirby. On west side of State Highway 35, northeast edge of Aransas Pass. Used drilled domestic well, diameter 4 inches, depth 39 feet. Measuring point, top of casing, 0.5 foot above land surface and 10.68 feet above mean sea level. Equipped with windmill. Water levels, in feet below measuring point: Apr. 19, 1939, 16.10; Mar. 19, 1940, 9.92; Aug. 5, 1940, 10.89; Dec. 7, 1940, 8.53.
- 46. R. R. Barber. In Estes, on northwest side of State Highway 35, 5.25 miles southwest of Rockport. Used drilled domestic and stock well, diameter 4 inches, depth 52 feet. Measuring point, top of casing 1 foot above land surface and 12.78 feet above mean sea level. Equipped with windmill. Water levels, in feet below measuring point: Apr. 19, 1939, 10.30; Mar. 19, 1940, 9.72; Dec. 8, 1940, 9.31.
- 59. E. F. Barber. Five and one-half miles west of Rockport. Used drilled domestic and stock well, diameter 3 inches, depth 97 feet. Measuring point, top of 3 by 8-inch wood water pipe clamp, 1 foot above land surface and 12.41 feet above mean sea level. Equipped with windmill. Water levels, in feet below measuring point: May 16, 1939, 12.00; Mar. 20, 1940, 10.95; Aug. 6, 1940, 10.90; Nov. 20, 1940, 10.34.
- 77. H. G. Smith. One-half mile southwest of center of Rockport, in southwest edge of Rockport. Used drilled domestic well, diameter 4 inches, depth 58 feet. Measuring point, top of casing, 0.5 foot above land surface and 10.86 feet above mean sea level. Equipped with automatic pump. Water levels, in feet below measuring point; June 19, 1939, 16.80; Mar. 19, 1940, 6.33; Aug. 6, 1940, 8.30; Nov. 20, 1940, 8.90.
- 244. Willie Owens. Six-tenths mile northeast of Oak Grove school. Unused drilled well, diameter 4 inches, depth 68 feet. Measuring point, 2-inch ell in top of 4-inch casing, 1.3 feet above land surface and 10.35 feet above mean sea level. Water levels, in feet below measuring point, 1940: Mar. 27, 12.71; Aug. 6, 14.12; Nov. 20, 13.88.
- 247. G. M. Broach. Six-tenths mile west of State Highway 35 on Bayside road, 60 feet north-northeast of windmill well. Used drilled domestic and stock well, diameter 4 inches, depth 29 feet. Measuring point, top of concrete base, 0.3 foot above land surface and 16.89 feet above mean sea level. Equipped with hand pump. Water levels, in feet below measuring point, 1940: Mar. 23, 5.50; Aug. 6, 8.92; Nov. 20, 7.25.

a Airline and gage measurement.

b Shut down 1 hour; measured by Mr. Russel.

c Measured with altitude gage.

#### Bailey County

- Well numbers correspond to those in Water-Supply Papers 840, 845, and 886.
- 5a. Gus Schrader.  $NW_4^{\frac{1}{4}}NE_4^{\frac{1}{4}}$  sec. 3, blk. Z, 10 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 64.13; Nov. 14, 64.27.
- 9. Jim Ellis.  $NE_4^1NW_4^1$  sec. 21, blk. Z, 10.5 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 39.07; Nov. 14, 40.16.
- 11. Tom Smith.  $NE_4^1SW_4^1$  sec. 22, blk. Z, 10.5 miles west of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 25.57; Nov. 14 27.24.
- 21a. Mrs. J. W. Gregory, Sr.  $NW_{\frac{1}{4}}^{\frac{1}{4}}NW_{\frac{1}{4}}^{\frac{1}{4}}$  sec. 6, blk. X, 8 miles west of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 23.88; Nov. 14, 25.97.
- 25. C. A. Wagner. Northwest corner  $SE_2^1$ .sec. 6, blk. Z, 8 miles west of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 21.88; Nov. 14, 24.86.
- 31. J. H. Farley. Northwest corner  $NW_2^1$  sec. 10, blk. X, 6.5 miles west of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 15.15; Nov. 14, 15.8.
- 33. Mrs. J. W. Gregory. Northwest corner  $SW_4^1$  sec. 12, blk. X, 7 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 30.05; Nov. 14, 33.27.
- 34a. ----.  $\rm NE_4^1 NE_4^1$  sec. 20, blk. X, 6 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 25.56; Nov. 14, 26.58.
  - 35. No measurements made in 1940.
- 35a. F. O. Boone.  $NE_4^1SE_4^1$  sec. 24, blk. X, 4.5 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 25.56; Nov. 14, 26.58.
- 36. J. M. Murrah.  $NE_7^4NW_2^4$  sec. 23, blk. X, 4.75 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 18.8; Nov. 14, 20.0.
  - 38. No measurements made in 1940.
- 45. H. M. Schofner.  $NW_2^1SW_2^1$  sec. 32, blk. Y, 2.25 miles northwest of Muleshoe. Water levels, in feet below measuring point, 1940: Feb. 26, 20.34; Oct. 28, 21.79; Nov. 14, 21.78.
- 49. Jess Mitchell. Northwest corner  $NE_{4}^{1}SE_{4}^{1}$  sec. 33, blk. X, 3.75 miles northwest of Muleshoe. Water level, in feet below measuring point, 1940: Nov. 14, 27.04.
- 53. W. B. Gwyn, Sr.  $NE_4^{\frac{1}{4}}SE_4^{\frac{1}{4}}$  sec. 22, blk. Y, 3.25 miles northwest of Muleshoe. Water level, in feet below measuring point, 1940: Nov. 14, 28.87.
- 62. Levi Churchill. Northwest corner SE $\frac{1}{4}$  sec. 42, blk. Y, £.75 miles north of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 23.13; Nov. 14, 27.13.
- 63. Sam Gorrell. Northwest corner SW $\frac{1}{4}$  sec. 42, blk. Y, 2.75 miles north of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 24.64; Oct. 28, 29.35; Nov. 14, 30.82.
- 66. J. L. Wallace. Northwest corner NE1 sec. 41, blk. Y, 2.25 miles north of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 21.48; Nov. 14, 23.57.
- 67. I. W. Hardin. Northwest corner  $\text{NE}_{4}^{1}\text{NE}_{4}^{1}$  sec. 41, blk. Y, 2.25 miles north of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 20.31; Nov. 14, 22.80.

## Bailey County -- Continued.

- 69. E. R. Hart.  $NW_{4}^{1}SW_{4}^{1}$  sec. 52, blk. Y, 1.75 miles north of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 17.50; Nov. 14, 17.91.
  - 70. No measurements made in 1940.
  - 74. No measurements made in 1940.
- 79. D. E. Cox. Southwest corner  $NW_4^1$  sec. 53, blk. Y, 1 mile north of Muleshoe.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

Date	Water level	Date	Water level	Date		Water level	Date	Water level
Apr. 15 Oct. 28 Nov. 13 21 22 23 24 25	24.38 25.44 25.49 25.30 25.31 25.31 25.31 25.28	Nov. 26 27 28 29 30 Dec. 1 2	25.30 25.30 25.28 25.29 25.29 25.30 25.29	Dec.	3 4 5 6 7 8 9	25.28 25.28 25.29 25.28 25.27 25.28 25.28	Dec. 10 11 12 13 14 15 16	25.29 25.28 25.28 25.29 25.29 25.28 25.29

- 92. L. H. McConnell.  $NW_{2}^{+}NE_{2}^{+}$  sec. 51, blk. Y, 3.25 miles north of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 22.02; Nov. 14, 24.65.
- 95. E. R. Hart. Northwest corner  $NW_4^1$  sec. 71, blk. Y, 4 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 24.88; Nov. 14, 26.34.
- 108. T. L. Mounce. Northwest corner SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, blk. W, 7 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 36.30; Nov. 14, 38.35.
- 116. C. B. Huggins.  $NW_4^1NE_4^1SW_4^1$  sec. 32, blk. W, 6 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 23.13; Nov. 14, 25.32.
- 117. H. L. Dempster. Northwest corner  $NW_2^1$  sec. 32, blk. W, 6 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 36.59; Nov. 14, 39.10.
- 120. I. F. Wilman. Northwest corner SW $\frac{1}{4}$  sec. 83, blk. Y, 5 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 27.8; Nov. 14, 29.73.
  - 124. Measurements discontinued.
  - 129. No measurements made in 1940.
- 130. E. R. Hart. Northwest corner NELSEL sec. 33, blk. W, 6 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 2.81; Nov. 14, 4.42.
- 131. R. D. Precure. Northwest corner SW $\frac{1}{2}$  sec. 34, blk. W, 6 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 21.67; Nov. 14, 23.55.
- 132. J. A. Ryan. Northwest corner  $SE_4^1$  sec. 34, blk. W, 6.5 miles northeast of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 22.76; Nov. 14, 24.25.
  - 135. Measurements discontinued.
- 136. C. A. Barnett. Northwest corner  $SE_2^1$  sec. 48, blk. W, 5.5 miles east of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 17.14; Oct. 28, 17.65; Nov. 13, 18.73.
- 137. C. H. Whitehead. Northwest corner  $SW_2^1$  sec. 48, blk. W, 4.75 miles east of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 18, 4.35; Nov. 13, 5.86.

## Bailey County -- Continued.

- 141. L. L. Lowery. Southwest corner  $NW_{\frac{1}{4}}$  sec. 49, blk. W, 4.5 miles east of Muleshoe. Water level, in feet below measuring point, 1940: Mar. 18, 3.27.
- 143. C. H. Whitehead. Southwest corner  $N_{\overline{z}}$  sec. 93, blk. Y, 4 miles east of Muleshoe. Water level, in feet below measuring point, 1940: Mar. 18, 1.08; measurements discontinued.

151a. Janes Estate. Near center of Lamar County School land section, 4.5 miles southeast from Muleshoe depot, 300 feet northeast from railroad crossing. Unused drilled well, diameter 12 inches, depth 26 feet. Measuring point, top of 13-inch cream can casing, 0.3 foot above land surface. Equipped with automatic water-stage recorder.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
1		23.30	23.30	23.26	23.26		23.64	24.02	24.19		24.60	24.63
			23.30									
			23.30									
			23.30									
5		23.30	23.30	23.26	23.28		23.67	24.06	24.22			24.63
			23.30									
			23.30									
			23.30									
			23.30									
			23.30									
			23.29									
			23.29									
			23.29									
			23.30									
			23.30									
			23.30					24.15				
			23.30					24.15				
			23.29									
			23.29									
			23.29									
			23.29									
			23.29									
			23.29									
			23.29									
			23.28									
			23.28									
			23.28									
			23.27					24.17				
			23.27									
			23.27									
31	23.30	• • • • •	23.27		• • • • •		24.01	24.18	• • • • •	24.60	• • • • •	• • • • •

- 152. Measurements discontinued.
- 153. Measurements discontinued.
- 156. Measurements discontinued.

201a. Halsell Land and Cattle Company. NW lab. 19, 1ge. 189, Ector County School Land, 5 miles south and 1.5 miles west from Muleshoe. Unused drilled well, diameter 6 inches, depth 57 feet. Measuring point, top of steel casing, 1.0 foot above land surface. Equipped with automatic water-stage recorder.

Daily noon water level, in feet below measuring point, 1939 (from recorder charts)

Date	Water level	Date		Water level	Date	Water level	Date	Water level
Nov. 10 16 23 29 30	38.75 38.63 38.74 38.61 38.58	Dec.	1 2 3 4	38.67 38.75 38.75 38.76	Dec. 11 12 13 14	38.76 38.85 38.87 38.74	Dec. 15 16 17 18	38.75 38.77 38.76 38.77

## Bailey County -- Continued.

201a.--Continued.

Daily noon water level, in feet below measuring point, 1940

(from recorder charts)

Day	y Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.88	39.02	39.07	39.30	39.58	••••	39.78	39.98	40.13		40.53	40.72
2		39.08							40.10			
3		39.01							40.11			
4							39.87	40.01	40.17		40.43	40.57
5		38.97	39.16	39.42	39.47		39.85	40.04	40.22			40.63
6			39.14						40.24			
7			39.23	39.31	39.55		39.89	39.99	40.25	40.45		40.67
	38.91				39.61				40.23			
9			39.10						40.12			
10			39.14						40.19			
11			39.18						40.23			
12			39.27						40.19			
	38.95		39.36						40.14			
									40.17			
									40.21			
									40.25			
									40.25			
18			39.38						40.25			
19	39.03		39.25						40.25			
20	38.96								40.28			
21									40.28			
			39.29						40.26			• • • • •
23			39.26						40.23			
24			39.37						40.27			
25	39.01								40.36			
26	39.00								40.28			• • • • •
27									40.20			
28									40.22			
29									40.31			
30	39.02	• • • • •							40.32			
31	38.98		39.33	••••	• • • • •		39.97	40.20	• • • • •	40.47	• • • • •	••••

- 205. No measurements made in 1940.
- 207. Whittington. SE $\frac{1}{4}$  lab. 22, lge. 188, 8 miles south of Muleshoe. Water level, in feet below measuring point, 1940: Mar. 26, 95.01.
  - 212. Measurements discontinued.
  - 225. Measurements discontinued.
  - 228. Measurements discontinued.
  - 235. Measurements discontinued.
  - 238. Measurements discontinued.
  - 240. Measurements discontinued.
- 322. G. H. Harvey.  $SW_2^4$  lab. 16, lge. 193, 5 miles east of Baileyboro. Water level, in feet below measuring point, 1940: Mar. 26, 79.61.
- 324a. Foard County School Land. NW2 lab. 15, 1ge. 192, 9 miles south of Muleshoe. Water levels, in feet below measuring point, 1940: Mar. 26, 100.97; Dec. 3, 100.37.
  - 333. Measurements discontinued.
  - 355. No measurements made in 1940.
  - 423. Measurements discontinued.
  - 427. Measurements discontinued.

## Bailey County -- Continued.

- 430. K. C. Moser. Southwest corner NW1 sec. 15, lge. 107, 13 miles south of Baileyboro. Water levels, in feet below measuring point, 1940: Mar. 26, 84.55; Dec. 3, 84.04.
- 435. I. C. Enochs.  $SE_4^1$  lab. 69, lge. 182, 9 miles southeast of Baileyboro. Water levels, in feet below measuring point, 1940: Mar. 26, 28.17; Dec. 3, 28.16.

## Bastrop County

Well numbers correspond to those in Water-Supply Papers 840, 845, and 886.

- 1. Cottonwood Colored School. On southwest side of U. S. Highway 290, 1.8 miles southeast of county line, 12.6 miles northwest of Bastrop. Water levels, in feet below measuring point, 1940: Apr. 1, 16.32; July 9, 16.85; Nov. 21, 16.90.
- 2. Ben Clayton. Near small one-story frame house, 0.05 mile south of U. S. Highway 290, 6 miles west-northwest of Bastrop. Water levels, in feet below measuring point, 1940: Apr. 1, 9.13; July 9, 4.46; Nov. 21, 7.21.
- 3. J. K. Young. Thirty feet west of cattle guard on west side of local road, 0.05 mile south of U. S. Highway 290, 2.8 miles west of Bastrop. Water levels, in feet below measuring point, 1940: Apr. 1, 30.16; July 9, 30.36; Nov. 21, 31.45.
- 4. Texas Public Utilities Company. On northwest side of water and ice plant, 1 block north of U.S. Highway 290, near center of Bastrop. Water levels, in feet below measuring point, 1940: Apr. 1, 29.33; July 9, 29.03; Nov. 21, 29.34.
  - 5. No measurements made in 1940.
- 7. Wesley McPhaul. In valley, 80 feet south of U. S. Highway 290, 10 miles east of Bastrop. Water levels, in feet below measuring point, 1940: Apr. 1, 10.88; July 9, 8.49; Nov. 21, 10.55.
- 8. Max Schlinder. Fifteen feet west of frame garage, 120 feet north of U. S. Highway 290, 2.55 miles east of railroad station at Paige. Water levels, in feet below measuring point, 1940: Apr. 1, 63.91; July 9, 64.46; Nov. 21, 64.48.
- 9. Paul Saegert. On west side of lane, 0.4 mile south of U. S. Highway 290, 2.8 miles east of Paige. Water levels, in feet below measuring point, 1940: Apr. 1, 119.62; July 9, 119.71; Nov. 21, 119.73.

## Bexar County

Well numbers correspond to those in Water-Supply Papers 840, 845, and 886.

15. Robert Mechler. Six miles east of Castroville. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17 Feb. 21 Mar. 21	126.62 128.03 129.37	Apr. 23 May 20 June 17	130.13 130.36 129.56	July 22 Aug. 23 Sept.24	128.63 132.59 133.23	Oct. 25 Dec. 2	133.45 129.60

26. Fuller's Earth Plant. South side U. S. Highway 290, 13.5 miles west of San Antonio.

Water level, in feet below measuring point, 1940

				July 22			
Feb. 21	112.14	May 20	114.64	Aug. 23	117.17	Dec. 2	113.71
Mar. 18	113.61	June 17	113.79	Sept.24	117.60		

91

#### Bexar County -- Continued.

Robert Boenig. South side U. S. Highway 290, 8 miles west of San Antonio. Water level, in feet below measuring point, 1940

Date	Water	Date	Water	Date	Water	Date	Water	
Feb. 21 Mar. 18 Apr. 26	71.09 72.51 73.74	May 20 June 17 July 22	1evel 73.63 72.74 71.89	Aug. 23 Sept.24	1evel 76.17 76.50	Oct. 21 Dec. 2	76.40 72.13	

Oscar Schievelbein. On north side of tin barn, on top of hill 25 feet southwest of end of rock-surfaced lane, 0.1 mile south of U. S. Highway 90, 11 miles west of post office at San Antonio.

Water level, in feet below measuring point, 1940

Jan. 17 125.80	Apr. 23	128.62	July 22	127.03	Oct. 21	131.44
Feb. 21 126.27					Dec. 2	
Mar. 18 127.68						

XB-2. Oscar Bippert. South side of U. S. Highway 90, near small brick house with wooden water tank on roof, on top of hill, at end of private road, 18 miles west of post office at San Antonio.

Water level, in feet below measuring point, 1940

Jan. 17	78.34	Apr.	26	82.20	July 22	80.33	Oct.	25	85.15
	79.75			82.10	Aug. 23	84.34	Dec.	2	81.32
Mar. 21 8	31.09	June	17	81.30	Sept.21	85.64			

XB-3. Beitel Church. In front yard of white church on north side of U. S. Highway 81, 7.9 miles northeast of postoffice at San Antonio.

Water level, in feet below measuring point, 1940

Simon and Borgfield. At west end of Converse gin, southeast of elevated water tank in Converse.

Water level, in feet below measuring point, 1940

Feb.	20	45.15	Apr.	26	47.63	June 21	45.96	Oct. 25	50.13
Mar.	22	46.34	May	23	47.21	June 21 Sept.24	50.30	Dec. 4	46.46

436. Beverly Lodges. At Beverly Lodges tourist court in northeast part of San Antonio, on old Austin-San Antonio road, 75 feet south of street, 150 feet west of west row of cabins. Unused drilled well, diameter 12 inches. Measuring point, top of casing, 1.5 feet above land surface and 724.06 feet above mean sea level. Water-level recorder maintained on well 724.06 feet above mean sea 10.00.
since Nov. 12, 1932.
Highest daily water level, in feet below measuring point, 1932
(from recorder charts)

Nov. 12	48.46	Nov. 24	48.16	Dec. 6	48.18	Dec. 20	48.15
13	48.24	25	48.08	7	48.23	21	48.12
14	48.09	26	48.16	8	48.25	23	48.01
15	48.14	27	48.24	9	48.12	24	48.03
16	48.32	28	48.19	10	48.16	25	48.11
17	48.18	29	48.22	14	48.06	26	48.05
18	48.18	30	48.24	15	48.07	27	48.02
19	48.14	Dec. 1	48.23	16	48.15	28	48.03
20	48.09	3	48.34	17	48.22	29	48.02
21	48.04	4	48.42	18	48.25	30	47.96
22	48.14	5	48.32	19	48.18	31	48.25
23	48.08	<b>i</b> .					

## Bexar County -- Continued.

436.--Continued.

Highest daily water level, in feet below measuring point, 1933

(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept	Oct.	Nov.	Dec.
8	48.11	48.38	47.76			50.47	51.08	51.53	51.11	51.44	51.48	51.96
							51.04					
10	48.04	48.60	47.96				50.88	51.74	51.30	51.60	51.79	51.76
							51.21					
12	48.06		47.88				51.49	51.75	51.44	51.64	51.77	51.68
							51.63					
14	48.08		47.87	49.16			51.68	51.58	51.74	51.86	51.82	51.69
15	47.95		48.05	48.76			51.76	51.99	51.72	51.70	51.83	51.73
							51.69					
							51.44					
18	47.87	47.13	48.05	49.00	50.35		51.72	51.50	51.07	51.82	52.05	51.54
19	47.91	47.09	48.13		50.41		51.91	51.48	51.03	51.96	52.01	51.59
20	47.90	47.10	48.08		50.37		51.95	51.40	50.98	51.98	51.76	51.61
21	47.85	47.16	48.17		50.38		52.12	51.28	51.12	52.02	51.83	51.60
22	47.85	47.24	48.17		50.22	50.36	52.12	51.50	51.30	52.01	51.94	51.60
23		47.25	48.40		50.50	50.51	52.00	51.69	51.24	51.85	52.03	51.61
24	47.80	47.25	48.40		50.57	50.66	51.81	51.87	51.27	52.00	52.05	51.58
	47.86						52.07					
							52.07					
							52.27					
							52.32					
							52.19					
30	47.88			49.56			51.70	51.44	50.84	51.70	51.97	51.54
31	47.93				• • • • •	• • • • •	51.36	51.26		51.78		51.61

Highest daily water level, in feet below measuring point, 1934 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	. Oct.	Nov.	Dec.
			51.14									
			50.00									
			49.30									
			49.19									
			49.03									
			49.09									
			49.12									
			49.34									
			49.64									
			49.66									
			49.64									56.00
			49.73									
			50.03									
			50.06									
			50.18									
			50.19									
18	51.67	51.06	50.44	49.90	51.60	54.33	56.01	55.25	55.91	57.02	56.25	55.70
19	51.47	51.06	50.33	49.72	51.68	54.45	56.34	55.28	56.10	56.91	56.08	55.85
20	51.36	51.14	50.45	49.35	51.85	54.58	56.51		56.09	56.85	56.00	55.83
			50.57									
			50.62									
			50.67									
			50.72									
		51.22					56.48					
			50.50									
			50.71									
			50.75									
	50.82						53.42 53.19					
			50.88									54.84
21	00.77	••••	00.87	••••	06.90	****	00.10	50.72	••••	01.20	••••	04.04

## Bexar County--Continued.

436.--Continued.

Highest daily water level, in feet below measuring point, 1935 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
1	55.06	55.55	55.29	56.68	56.47	46.38			45.69	42.02		43.95
2	55.13	55.67	55.24	56.80	56.38	46.13			45.60	42.17		44.00
3	55.08	55.62	55.25	56.76	56.18	45.95			45.70	42.26		44.10
						45.52				• • • • •		44.15
5	55.23					45.20		42.75				44.05
6	55.23		55.28			45.10		43.10				44.01
7						45.07						43.98
						45.08	• • • • •					
			55.34						44.56			43.85
	55.39	55.68			53.73				44.31		• • • • •	43.95
	55.46		55.29		52.90		• • • • •		44.13		• • • • •	43.91
	55.51		55.66				• • • • •		43.98		• • • • •	43.95
			55.41		52.40	• • • • •			43.82	• • • • •		43.87
			55.48		52.55	• • • • •		43.82			• • • • •	43.88
			55.69		52.73	• • • • •			• • • • •			44.00
			55.77		52.75		• • • • •		• • • • •			43.92
			55.98				• • • • •				• • • • •	
			55.86			• • • • •		44.14			• • • • •	
			55.95		49.75	• • • • •			43.60		47.50	44.05
20	55.77		56.14				• • • • •		43.65	• • • • •		44.12
	55.10						• • • • •		43.84			44.02
			56.44					44.78				
			56.58			• • • • •		44.93		• • • • •		43.94
			56.68			• • • • •		44.98				44.06
25		54.79		57.00		*****		45.06				
		55.09		57.11				44.98		• • • • •		
			56.89			38.80		45.12				44.15
			57.09					45.37				44.00
29	55.39	• • • • •	57.26		47.31		• • • • •		::-::			44.10
30	55.47					••••						44.08
ŞΙ	55.50	****	20.82	• • • • •	46.63	• • • • •	• • • • • •	45.72	• • • • •		• • • • •	44.12

Highest daily water level, in feet below measuring point, 1936 (from recorder charts)

Day Jan. Feb. Mar. Apr. May June July Aug.	Sept. Oct.	Nov.	Dag
			Dec.
1 44.11 45.20 46.08 45.72 46.48 41.10 4	12.95 42.35	41.89	42.08
2 44.10 45.12 45.88 46.02 46.50 41.04 4			
3 44.02 45.02 45.52 46.12 46.52 41.06 4			
4 44.10 45.30 45.15 45.97 46.45 41.20 4			
5 43.95 45.45 45.02 45.95 46.70 41.25 4	43.18 42.10	42.05	42.23
6 44.10 45.46 44.89 46.10 46.82 41.30 41.14 4	43.25 42.23	42.04	42.25
7 44.35 45.55 44.83 46.24 46.97 41.40 41.32 4	43.12 42.23	42.15	42.25
8 44.39 45.57 44.80 46.24 46.98 41.48 41.40 4	43.25 41.98	42.25	42.34
9 44.41 45.63 44.74 46.24 46.85 41.77 41.53 4	13.42 41.88	42.20	42.25
10 44.48 45.58 44.72 46.48 46.65 41.95 41.43 4	13.72 41.80	42.25	42.23
11 44.52 45.60 44.72 46.69 46.48 42.18 41.85 4			
12 44.58 45.62 44.77 46.82 46.42 42.24 42.05 4			
13 44.57 45.63 44.71 46.65 46.45 42.27 42.28 4			
14 44.65 45.72 44.77 47.12 46.42 42.47 42.28 4	43.70 41.85	42.06	42.28
15 44.75 45.80 44.80 47.26 46.43 42.43 42.56 4			
16 44.75 45.82 44.84 47.25 46.45 42.46 4			
17 44.79 45.70 44.99 47.34 46.48 42.40 4			
18 44.82 45.95 44.95 47.44 46.54 42.75 4			
19 45.10 45.95 45.07 46.65 42.90 4			
20 44.85 45.84 45.22 47.23 46.50 43.07 4			
21 44.88 45.92 45.26 47.09 46.58 43.21 4			
22 44.94 45.97 45.17 46.95 46.65 43.30 4			
23 44.98 46.00 45.10 46.90 46.52 43.32 4			
24 45.04 45.85 45.30 46.89 45.58 43.24 4			
25 45.11 45.92 45.46 46.87 44.57 43.34 4			
26 45.15 45.90 45.42 46.94 43.73 43.40 4			
27 45.15 46.02 45.50 46.85 43.26 43.56 4			
28 45.26 46.07 45.65 46.70 42.25 43.50 4			
29 45.15 46.16 45.68 46.58 41.77 43.35 4			
30 45.18 45.62 46.55 41.40 43.35 4			
31 45.25 45.79 41.30 43.12 .	41.95		42.55

## Bexar County -- Continued.

436.--Continued.
Highest daily water level, in feet below measuring point, 1937
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
			43.95									
			44.01									
			44.00									
			43.93									
			43.92									
			43.75									
			43.55									
			43.41									
			43.44									
			43.30									
			43.20									
			43.27									
			43.25									
			43.10									
			43.07									
			42.96									
			42.93									
			42.96									
			42.92									
			42.95									
			43.03									
			42.94									
			43.00									
			43.00									
			42.90									
			42.91									
			42.93									
			42.93									
			42.84									
			42.87									
31	43.33		42.92		46.28	• • • • •	46.55	48.20	• • • • •	48.27	• • • • •	46.38

Highest daily water level, in feet below measuring point, 1938 (from recorder charts)

					I rom	recorde	er chai	rts)				
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
1	46.18	43.34	44.73	45.42	42.95	44.05	47.44	48.17	49.83	50.05	50.33	50.06
2	46.02	43.22	44.74	45.57	42.80	44.19	47.55	48.51	49.92	50.10	50.22	50.05
3	45.97	43.30	44.80	45.60	42.80	44.25	47.56	48.70	49.97	49.94	50.40	50.07
4	46.10	43.35	44.80	45.52	42.85	44.45	47.44	48,70	49.83	50.17	50.30	50.06
5	46.07	43.37	44.95	45.60	42.70	44.62	47.56	48.78	49.50	50.31	50.30	50.16
6	46.02	43.48	45.13	45.63	42.67	44.55	47.76	48.83	49.58	50.32	50.12	50.05
7	46.19	43.51	45.05	45.72	42.78	44.65	47.87	48,81	49.78	50.34	50.17	50.02
8	46.22	43.61	45.11	45.65	42.79	44.97	48.07	48.68	49.78	50.25	50.06	50.13
							47.95					
							47.97					
							47.83					
							48.11					
							48.19					
							48.40					
							48.35					
							48.47					
							48.41					
							48.26					
							48.61					
							48.69					
							48.87					
							48.74					
							48.48					
24	44.77	44.62	45.38	44.85	43.28	46.89	48.15	49.99	49.42	50.19	50.05	50.42
							47.90					
							48.15					
							48.19					
							48.35					
							48.40					
							48.46					
31	43.28		45.43		43.78		48.29	49.82		50.39	****	50.03

## Bexar County -- Continued.

436.--Continued.
Highest daily water level, in feet below measuring point, 1939

(from recorder charts)

Da	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
									• • • • •			
	50.19		51.03									
	50.11								••••			
									• • • • •			
									• • • • •			
									• • • • •			
	50.10	50.75		53.70					• • • • •			
	50.07			53.59					• • • • •			
									• • • • •			56.64
									• • • • •			
									• • • • •			
			51.62						• • • • •			56.34
19	50.12								• • • • •			56.52
20			51.53						• • • • •			56.57
			51.71						• • • • •			
									• • • • •			
23									• • • • •			56.38
24	50.10	50.99	51.87						• • • • •			56.52
	50.29	50.87							• • • • •			56.27
26	50.21								• • • • •			55.97
									• • • • •			56.02
									• • • • •			56.02
	49.95	••••							• • • • •			56.12
	50.06								• • • • •			55.99
31	50.15	• • • • •	28.16	••••	55.62			• • • • •	• • • • •		••••	55.84

Highest daily water level, in feet below measuring point, 1940 (from recorder charts)

Da	y Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
								60.40				
			57.45					60.45				
	55.85							60.64				
	55.74							60.56				
5			57.60	• • • • •		58.79		60.52				
	55.77							60.89				
7			57.79					61.06				
_			57.97					61.25				
			58.05					61.47				
	55.67							61.53				
	55.57							61.36				
			58.15					61.24				
	55.57							61.63				
			58.36					61.81				
15			58.56					61.85				
	55.89							61.93				
			58.52									
			58.40									
			58.70									
			58.50									
	56.72		58.35					61.74				
	56.50											
			• • • • •									
			• • • • •									
25			• • • • •									
26			• • • • •					61.86				
27			• • • • •									
28			• • • • •									
29												
			• • • • •									
31	56.50			• • • • •	58.05		60.18	62.07		60.81		53.35

## Brazos County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 7. W. H. Hanover. North side of "Old San Antonio Road", 11.8 miles northeast of Benchley. Water levels, in feet below measuring point, 1940: Apr. 2, 29.68; July 10, 21.32; Nov. 22, 31.61.
- 9. Grant McDonald. On south side of "Old San Antonio Road", 1.85 miles west of Navasota River bridge. Water levels, in feet below measuring point, 1940: Apr. 2, 26.42; July 10, 26.74; Nov. 22, 26.89.

## Brooks County

- Well numbers correspond to those in Water-Supply Papers 777, 840, 845 and 886.
  - 202. No measurements made in 1940.
- 254. E. G. Maun. Two and one half miles northwest of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 18, 14.61.
- 266. Mrs. B. M. McCullar. Two miles northwest of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 18, 18.75.
- 270. J. W. Story. One mile northwest of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 21.30.
  - 272. Measurements discontinued.
- 273. George Franks. One and one half miles west of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 16.64.
  - 322. Filled in. Measurements discontinued.
- 323. R. D. Donahoe. One mile southwest of center of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 18, 16.06.
- 324. L. O. Atkinson. One mile south of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 18, 16.87.
- 333. A. L. Brochet. One mile south of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 18, 15.30.
- 334. Cecilio Salinas. One mile south of center of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 17, 15.54.
- 336. R. E. Freeze. One and one half miles south of center of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 17, 12.97.
- 337. Mrs. J. S. Donahue. One and one half miles south of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 18, 14.27.
- 340. Dr. H. M. Bennett. Two miles south of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 17, 9.51.
- 390. Southern Pacific Railway. South of railway station in Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 16.34.
- 397. J. W. Dale. Two miles east of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 21.91.
- 405. A. Rupp. Five miles east of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 22.45.
- 474. A. Rupp. Five and one half miles east-southeast of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 24.26.
- 504. Neal Rupp. Five and one half miles east-southeast of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 27.04.
- 505. Neal Rupp. Five and one half miles east-southeast of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 19, 23.64.
- 821. Garcia Ramos. Twelve miles west-northwest of Rachal. Water level, in feet below measuring point, 1940: Feb. 18, 69.17.

## Brooks County -- Continued.

- 822. Garcia Ramos. Twelve miles west of Rachal. Water level, in feet below measuring point, 1940: Feb. 18, 58.53.
- 865. Florencic Rodriguez. Four and one half miles west of Rachal. Water level, in feet below measuring point, 1940: Feb. 18, 77.98.
  - 872. No measurements made in 1940.
  - 874. No measurements made in 1940.
- 882. E. Villareal. Five miles west of Rachal. Water level, in feet below measuring point, 1940: Feb. 18, 86.32.
- 885. Juan Longoria. Four and one half miles west of Rachal. Water level, in feet below measuring point, 1940: Feb. 14, 65.79.
- 918. Jose Garcia Ramos. West side of highway, Encino settlement. Water level, in feet below measuring point, 1940: Feb. 18, 43.27.
- 920. Prospero Mangel, Jr. West side of highway, Encino settlement. Water level, in feet below measuring point, 1940: Feb. 18, 45.08.
- 921. Nicolas Cantu. East side of highway, Encino settlement. Water level, in feet below measuring point, 1940: Feb. 18, 42.61.

#### Burleson County

- Well numbers correspond to those in Water-Supply Papers 845 and 886.
- 42. City of Caldwell. North side of State Highway 36, at northeast edge of Caldwell. Water levels, in feet below measuring point, 1940: Apr. 1, 1.18; July 9, 1.12.
- 43. City of Caldwell. One hundred twenty feet northeast of well 42. Water levels, in feet below measuring point, 1940: Apr. 1, 0.98; July 9, 0.96.
- 48. Otto Benndt. State Highway 36, 1 mile north of Caldwell. Water levels, in feet below measuring point, 1940: July 9, 33.32; Nov. 21, 33.27.
- 71. A. R. Richardson. Seventy-two feet east of old State Highway 36, 2.5 miles north of Chriesman. Water levels, in feet below measuring point, 1940: Apr. 1, 56.06; July 9, 56.21; Nov. 21, 56.31.
- 75. L. Kornegay. Fifteen hundredths mile north from crossroads in Chriesman, 7 miles northwest of Caldwell. Water levels, in feet below measuring point, 1940: Apr. 1, 45.48; July 9, 45.44; Nov. 21, 45.53.
- 114. Joe Veiss. About 1.25 miles southwest of Caldwell. Water levels, in feet below measuring point, 1940; Apr. 1, 14.20; July 9, 13.34; Nov. 21, 14.34.
  - 115. No measurements made in 1940.
  - 147. Filled in. Measurements discontinued.
- 211. Santa Fe R. R. About 40 feet southwest of well 115. Unused drilled industrial well, diameter 10 inches, depth 353 feet. Measuring point, top of casing, 1 foot above land surface. Water levels, in feet below measuring point: Oct. 19, 1938, 83.65; May 2, 1939, 82.78; Dec. 6, 1939, 81.57; Nov. 21, 1940, 82.59.

## Carson County

- Well numbers correspond to those in Water-Supply Paper 886:
- 165A. Along U. S. Highway 60, 3 miles southwest of Gray-Carson County line. Water levels, in feet below measuring point, 1940: Apr. 9, 332.02; Aug. 6, 332.13; Dec. 4, 332.09.
  - 174. No measurements made in 1940.

## Castro County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 4. L. L. Cannon. At railroad crossing in west edge of Summerfield. Water level, in feet below measuring point, 1940: Nov. 8, 104.88.
- 8. S. P. Rosson. NW cor.  $SW_1NW_2$  sec. 125, blk. M-7, 4.5 miles southeast of Summerfield. Water level, in feet below measuring point, 1940: Mar. 19, 74.76.
- 12. L. B. Holland. SW cor.  $SW_2^1NW_4^1$  sec. 128, blk. M-7, 3.75 miles east of Summerfield. Water levels, in feet below measuring point, 1940: Mar. 19, 101.26; Nov. 17, 102.66.
  - 18. No measurements made in 1940.
- 20. A. C. Hawks. NW cor.  $NW_4^1NE_4^1$  sec. 97, blk. M-7, 8.0 miles east of Summerfield and 1.7 miles southeast of Frio Public School. Water levels, in feet below measuring point, 1940: Mar. 19, 73.32; Nov. 7, 79.06.
- 31. T. L. Sparkman, Jr. NW cor. SELSW sec. 74, blk. M-7, 3.0 miles south of Castro-Deaf Smith County line, 1.75 miles west of State Highway 51. Water levels, in feet below measuring point, 1940: Mar. 19, 63.28; Nov. 7, 68.25.
- 32. W. A. Springer. SW\u00e4NW\u00e4\u00e4 sec. 81, blk. M-7, 8.0 miles east of Summerfield and 2.0 miles east of Frio Public School. Water levels, in feet below measuring point, 1940: Mar. 19, 64.46; Nov. 7, 68.25.
- 36. M. C. Hancock. SWANE sec. 72, blk. M-7, 12 miles north of Dimmitt. Water levels, in feet below measuring point, 1940: Mar. 19, 85.23; Nov. 7, 92.44.
- 40. W. W. Adams.  $NW_{4}^{1}SW_{4}^{1}$  sec. 51, blk. M-7, 10 miles north of Dimmitt. Water levels, in feet below measuring point, 1940: Mar. 19, 65.75; Nov. 7, 68.67.
- 46. Edwin Mauk. SW cor. SW2 sec. 54, blk. M-7, 7 miles north of Dimmitt. Water levels, in feet below measuring point, 1940: Mar. 19, 75.20; Nov. 7, 78.28.
- 48. J. M. Richardson. NW cor.  $NW_2^1$  sec. 30, blk. M-7, 13.2 miles east of Summerfield. Water levels, in feet below measuring point, 1940: Mar. 19, 64.41; Nov. 7, 68.86.
- 52. C. G. Maples.  $NW_4^1NE_4^1$  sec. 1, blk. M-10A,  $6\frac{1}{3}$  miles north of Dimmitt. Water level, in feet below measuring point, 1940: Mar. 19, 71.59. Pump installed. Measurements discontinued.
- 53. W. A. Hunter. SW cor.  $SW_2^2NW_4^2$  sec. 52, blk. M-7, ll.0 miles east of Summerfield. Water levels, in feet below measuring point, 1940: Mar. 19, 61.62; Nov. 7, 64.45.
- 57. E. S. Ireland. SE\(\frac{1}{2}\)SE\(\frac{1}{2}\) sec. 33, blk. M-7, 6 miles north of Dimmitt. Water levels, in feet below measuring point, 1940; Mar. 19, 78.87; July 23, 79.45; Dec. 19, 79.57.
- 58.  $SW_2SW_2$  sec. 2, J. E. Tucker subd., 2 miles northeast of Dimmitt. Water levels, in feet below measuring point, 1940: Mar. 19, 154.04; July 23, 154.01; Nov. 7, 154.16; Dec. 19, 154.92.
- 201.  $NW_{1}^{1}NE_{2}^{1}$  sec. 339, blk. M-6, 6.5 miles east of Dimmitt. Water levels, in feet below measuring point, 1940; Mar. 20, 153.02; July 25, 152.89; Dec. 19, 153.03.
- 202. Frank Huseman. SWISEISWI sec. 222, blk. M-6, 11 miles east of Dimmitt. Water levels, in feet below measuring point, 1940: Mar. 20, 105.17; July 23, 105.30.
- 203. B. Decker Estate. Swisbis ec. 217, blk. M-6, ll miles east of Dimmitt. Water levels, in feet below measuring point, 1940: Mar. 20, 99.75; July 23, 99.77. Measurements discontinued.

#### Cherokee County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

- 22. Ben Pritchard. Near U. S. Highway 69, 5.15 miles north of railroad station at Mt. Selman. Water levels, in feet below measuring point, 1940: Apr. 3, 9.27; July 11, 6.92; Nov. 26, 3.74.
- 27. G. A. McKee. At south city limits of Mt. Selman, on U. S. Highway 69. Water levels, in feet below measuring point, 1940; Apr. 3, 32.71; July 11, 31.53; Nov. 26, 5.18.
- 158. G. N. Smith. About 500 feet west of U. S. Highway 69, 1.9 miles north of junction with U. S. Highway 175 in Jacksonville. Water levels, in feet below measuring point, 1940; Apr. 3, 15.89; July 11, 12.89; Nov. 25, 6.45.
- 159. Henry Grimes. About 500 feet west of U.S. Highway 175 in Jacksonville. Water levels, in feet below measuring point, 1940: Apr. 3, 30.30; July 11, 26.73; Nov. 25, 24.20.
- 179. Ruth Ragsdale. Four and eighty-five hundredths miles northwest of Jacksonville. Water levels, in feet below measuring point, 1940: Apr. 3, 14.38; July 11, 13.06; Nov. 25, 5.27.
- 186. Joanna Thomas. Nine and one-fourth miles northwest of Jacksonville. Water levels, in feet below measuring point, 1940: Apr. 3, 29.01; July 11, 28.73; Nov. 25, 29.02.
- 365. M. G. Hazell. Six and ninety-five hundredths miles southeast of Rusk. Water levels, in feet below measuring point, 1940: Apr. 9, 36.33; July 16, 36.28; Nov. 29, 35.81.
- 418. Mrs. Betty Ferguson. Fifteen feet west of yellow house with tin roof and white porch, 0.3 mile north of junction of county road and highway, 10.4 miles southeast of city park in Jacksonville along U. S. Highway 69. Water levels, in feet below measuring point, 1940: Apr. 9, 21.49; July 16, 19.46; Nov. 29, 9.69.
- 502. Texas State Forest well 3. About 300 feet east of forester's residence. Twelve and one half miles west of Rusk on U. S. Highway 84. Unused drilled CCC camp well, diameter 6 inches, depth 1,420 feet, water-bearing bed at about 500 feet. Measuring point, top of casing, 1.5 feet above land surface. Water levels, in feet below measuring point: Dec. 14, 1939, 128.89; Apr. 9, 1940, 129.03; July 16, 1940, 129.46; Nov. 19, 1940, 128.65.
- 622. W. S. Satterwhite. Nine and one half miles southeast of Rusk. Water levels, in feet below measuring point, 1940: Apr. 9, 13.99; July 16, 14.16; Nov. 28, 5.43.
- 657. City of Alto. In Alto, about 20 feet northeast of city pumping plant. Forty feet north of well 658. Used drilled public supply well, diameter 6 inches, depth 525 feet. Measuring point, top of discharge pipe, 6 feet above land surface. Equipped with air lift.

Water level, in feet below measuring point, 1938-40

Date	Water level	Date	Water level	Date	Water level
Oct. 12, 1938 Feb. 10, 1939 May 8	150.87 147.02 147.60	Dec. 14, 1939 Apr. 9, 1940	199.15 149.13	July 16, 1940 Nov. 29	150.02 150.80

658. City of Alto. In Alto, about 30 feet southeast of city pumping plant, about 40 feet south of well 657. Used drilled public supply well, diameter 6 inches, depth 600 feet. Measuring point, top of steel pump base, 1.5 feet above land surface. Equipped with turbine pump. Water levels, in feet below measuring point: Feb. 10, 1939, 139.00; Dec. 14, 1939, al49; July 16, 1940, al46; Nov. 29, 1940, al47.

a Airline and gauge measurement.

#### Cherokee County -- Continued.

- 690. Mrs. Ellamae McCulloch. East side of U.S. Highway 69, 1.85 miles southeast of Alto. Water levels, in feet below measuring point, 1940: Apr. 9, 7.89; July 14, 8.04; Nov. 28, 4.94.
- 694. G. M. Harry. West side of U. S. Highway 69, 11.9 miles southeast of Alto. Water levels, in feet below measuring point, 1940: Apr. 9, 20.03; July 14, 19.62; Nov. 28, 20.01.
- 707. E. R. McClain. West of U. S. Highway 69, 16.1 miles southeast of Alto. Water levels, in feet below measuring point, 1940: Apr. 9, 32.68; July 14, 32.25; Nov. 28, 32.04.

## Cochran County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

- 1. Beck Gin Company. Northeastern edge of Whiteface. Water level, in feet below measuring point, 1940: Mar. 26, 151.35.
- 3. Two and eight-tenths miles northwest of Whiteface. Water level, in feet below measuring point, 1940: Mar. 26, 154.37. Measurements discontinued.
  - 4. Measurements discontinued.
- 5. Dave Linder. Fifteen hundredths mile south of State Highway 24, 7.9 miles northwest of Whiteface. Water levels, in feet below measuring point, 1940: Mar. 26, 126.92; Dec. 3, 126.71.
  - 6. Measurements discontinued.
  - 7. Measurements discontinued.
  - 8. Measurements discontinued.
- 10. Five miles north of Morton,  $NW_4^2SE_4^2$  sec. 30, lge. 105. Water levels, in feet below measuring point, 1940: Mar. 26, 94.81; Dec. 3, 95.02.
  - 11. No measurements made in 1940.

#### Comal County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

117. Alfred Beferle. Elias Flint survey, 3.5 miles southeast of Spring Branch.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29 Feb. 27 Mar. 26	134.07 135.06 130.88	Apr. 30 May 23 July 1	131.39 130.80 133.25	Aug. 28 Sept.27	128.96 126.72	Oct. 29 Dec. 5	125.77 131.25

ll8. Henry Jonas Estate. A. H. Jones survey 78, 3 miles northwest of Smithson Valley.

		Wate	er level.	in feet be	elow measur	ing poin	t. 1940	
Jan.	29	93.49	Apr. 30	93.49	July 26	93.54	Oct. 29	93.48
Feb.	27	93.52	May 29	93.49	Aug. 28	93.47	Dec. 5	93.49
Mar.	26		July 1	93.51	Sept.27	93.48		

119. John Stricker. Four miles southeast of Spring Branch.

		Wat	er level,	in feet be	elow measu:	ring poin	t, 1940	
Jan.					July 25			173.99
Feb.	27	173.53					Dec. 5	174.33
Mar.	26	173.86	June 27	174.06	Sept.26	174.24		

101

## Comal County -- Continued.

PAYSIT

120. S. L. Gill. William Strawn survey 74, 2 miles south of Spring Branch.

1940 Water level, in feet below measuring point. Water Water Water Water Date Date Date Date level level level level 78.60 Apr. 30 80.86 82.85 Oct. 29 84.20 Jan. 29 July 25 Feb. 28 80.31 May 23 Aug. 28 84.06 75.86 81.00 5 Dec. Mar. 26 80.95 June 27 86.13 Sept.26 82.77

127. No measurements made in 1940.

131. J. J. Arrechea. Theo. Hanz survey 725, 5.5 miles south of Spring Branch.

Water level, in feet below measuring point, 1940 Jan. 29 119.91 Apr. 30 120.83 121.37 120.58 July 25 Oct. 29 Feb. 27 120.11 May 29 120.76 Aug. 27 120.98 121.52 Dec. Mar. 26 120.34 June 27 120.82 Sept.27 121.21

155. George Fronne. Aga. Hara survey, 6 miles north of Bulverde.
Water level, in feet below measuring point, 1940

Jan. July 25 29 121.00 May 23 116.65 116.62 Sept.26 116.82 Feb. 28 116.66 116.31 July l 116.73 Aug. 27 116.70 0ct. 28 Mar. 26 116.50

162. O. A. Doeppenschmidt. Two hundred feet northwest of State Highway 46, 9 miles east of Bulverde. Used drilled stock well, diameter 6 inches, depth 350 feet. Measuring point, top of iron water pipe clamp, 0.6 foot above land surface.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Oct. 11, 1939	139.86	Mar. 26, 1940	140.08	Sept.27	138.39
Jan. 29, 1940	139.71	Apr. 29	140.01		140.51
Feb. 27	139.85	May 23	139.99		140.05

171. Mrs. Mattie Shelburne. C. George survey, 3 miles northeast of Bulverde.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29 Feb. 28 Mar. 26	239.03 239.11 239.45	Apr. 30 May 23 June 27	239.47 239.54 239.71	July 25 Aug. 27 Sept.26	239.69 239.83 240.19	Oct. 28 Dec. 5	239.90 239.35

183. August Wehe. At town of Bulverde, G. Herrera survey 192.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 29 Feb. 27	281.52 278.71	May 23 July 1	278.97 277.44	Aug. 27	283,05

184. Charles Willig. A. Gayton survey 194, 1.5 miles east of Bulverde. Water level of Nov. 12, 1936, affected by flood stage of nearby river. Corrected measurements for 1939 are included.

~			Water	level	l, in	feet	below	measuring	point	t, 19	939-40	
Oct.	11,	1939	323	•09	Feb.	27.	1940	323.17	June	27.	1940	324.44
Dec.				.35	Apr.	30		323.69				324.44
Jan.	30,	1940	326	•00	May	23		320.24	Oct.	29		325.25

#### Comal County -- Continued.

193. W. B. Ethridge. Anna Vecker survey 678, 5.5 miles east of Bulverde.

ulverde.

Water level. in feet below measuring point. 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30 Feb. 28 Apr. 30	225.33 224.71 225.31	May 23 June 27 July 25	224.71 223.75 225.81	Aug. 27 Sept.26	225.08 226.01	Oct. 29 Dec. 5	225.97 217.12

195. Robert Heimer. About 200 feet northwest of State Highway 46, 9 miles east of Bulverde. Used drilled domestic and stock well, diameter 6 inches, depth 178 feet. Measuring point, top of iron water pipe clamp, 0.7 foot above land surface. Equipped with windmill.

Water level, in feet below measuring point, 1940 Jan. 29 50.00 Apr. 29 50,05 Sept.27 50.06 49.98 Dec. Feb. 27 50.05 June 27 Oct. 29 50.05 49.97

221. Albert Simon. Juan M. De Veramendi survey, 4 miles north of New Braunfels.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level Jan. 29 170.71 Apr. 29 170.73 Aug. 28 170.64 Mar. 26 170.89 24 170.96 Sept.23 171.20 May

222. William Kraft. Juan M. de Veramendi survey, 4 miles northwest of New Braunfels.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29 Feb. 27 Mar. 26	183.21 183.32 183.49	Apr. 29 May 24 July 1	183.37 183.54 182.46	July 29 Aug. 28	182.49 183.29	Sept.23 Oct. 29	183.78 184.12

 $223.\$  Albert Kraft. I. Miller survey 266, 4.5 miles northwest of New Braunfels.

Water level, in feet below measuring point, 215.23 Apr. 29 215.62 214.38 216.09 Jan. 29 July 26 Oct. 29 Feb. 27 216.56 May 24 215.74 Aug. 28 215.20 Dec. 215.96 Mar. 26 July 216.23 214.97

225. W. H. Harborth Estate. E. Hernandez survey 454, 4 miles north-west of New Braunfels.

Water level, in feet below measuring point, 1940 183.62 183.79 29 183,10 182.60 183.20 184.13 184.16 Jan. Apr. May 29 July 29 oct. 29 Aug. 28 Feb. 27 24 183.32 Dec. 5 Mar. 26 183.57 June 27 183.14 Sept.26 183.75

226. Henry Heise. E. Hernandez survey 454, 5 miles north of New Braunfels.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level 251.07 Jan. 29 250.57 Mar. 26 Oct. 29 251.75 Feb. 27 250.82 251.81 250.18 5 July 1 Dec.

# Comal County -- Continued.

232. A. J. Caldwell. H. Adams survey 652, 8 miles northwest of

e₩	Braunfels.		 ••		 	 
		 		_	 	

		Water		Water		Water		Water
Date		level	Date	level	Date	level	Date	level
Jan.		180.30	May 23	180.77	Aug. 27	178.83	Oct. 28	185.31
Feb.		175.89	June 27	181.33	Sept.26	177.27	Dec. 5	187.62
Apr.	29	177.94	July 26	182.86	L		·	
	263-	A. Alfre	d Kappelma	cher. At	junction of	of Bulver	de and Sta	te High-
way	46, 3	.75 mile	s northwest	t of New 1	Braunfels.			
		Wat	er level, i	in feet b	elow measur	ring poin	t, 1940	
Jan.		234.75	Apr. 29	235.12	July 26	234.54	Oct. 29	235.97
Feb.		234.89	May 23	234.98	Aug. 27	235.11	Dec. 5	236.00
Mar.	26	235.12	June 27	234,18	Sept.23	235.55		
	271.	Robert	Raabe. Or	ne and one	e-half mile	s northe	ast of Gru	ene stat
		Wate	r level, in	n feet be	low measuri	lng point	, 1940	
Jan.	23	92.86	Apr. 27	93.02	July 29	92.50	Oct. 29	93.43
Feb.		93.04	May 29	93.00	Aug. 27	92.95	Dec. 5	92.77
Mar.	22	93.12	June 27	92.65	Sept.27	93,32		
	274.	Charle	s Soechting	g. Three	miles nort	heast of	Gruene st	ation.
		Wat	er level,	in feet b	elow measu	ring poin	t. 1940	
Jan.	23	156.10	Mar. 22	156.17	June 27	155.82	Oct. 30	156.17
								T-00 - T-1
,	278.	theast o	Apr. 29 Gruene. Tr	155.52 wo and one l school.	Aug. 27	155.45 es southw	est of Hur	
mile Jan.	278. s nor	Nancy theast of Wate	Gruene. Tr f Thornhill er level, :	wo and one school. in feet be 152.93	Aug. 27 e-half mile elow measur July 26	155.45 es southwring poin 151.82	est of Hur t, 1940	153.37
mile Jan.	278. s nor 23 27	Nancy theast of Wat 152.58 152.69	Gruene. To f Thornhill er level, : Apr. 29 May 24	155.52  wo and one 1 school. in feet be 152.93 152.85	Aug. 27 e-half mile elow measur July 26 Aug. 27	155.45 es southwring point 151.82 152.50	est of Hur	nter, 4.4
mile Jan.	278. s nor 23 27	Nancy theast of Wate	Gruene. Tr f Thornhill er level, :	wo and one school. in feet be 152.93	Aug. 27 e-half mile elow measur July 26	155.45 es southwring poin 151.82	est of Hur t, 1940	153.37
mile Jan. Feb.	278. s nor 23 27	Nancy theast of Wat 152.58 152.69 152.84	Gruene. To f Thornhill er level, : Apr. 29 May 24	155.52  wo and one 1 school. in feet be 152.93 152.85 151.95	Aug. 27 e-half mile elow measu July 26 Aug. 27 Sept.27	155.45 es southwring point 151.82 152.50	est of Hur t, 1940	153.37
Jan. Feb.	278. s nor 23 27 22 281. 291.	Nancy theast of Wat 152.58 152.69 152.84	Gruene. To f Thornhill er level, f Apr. 29 May 24 July 1	wo and one school. in feet be 152.93 152.85 151.95 continued	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27	155.45 es southwring poin 151.82 152.50 153.17	est of Hur t, 1940 Oct. 29 Dec. 5	153.37 152.11
Jan. Feb.	278. s nor 23 27 22 281. 291.	Nancy theast o Wat 152.58 152.69 152.84 Measur Oscar	Gruene. Tri f Thornhill er level, 2 Apr. 29 May 24 July 1 ements disc	wo and one is school. in feet b. 152.93 152.85 151.95 continued ne and one	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mil	155.45 es southwring point 151.82 152.50 153.17 les south	est of Hur t, 1940 Oct. 29 Dec. 5	153.37 152.11
Jan. Feb. Mar.	278. s nor 23 27 22 281. 291.	Nancy theast o Wat 152.58 152.69 152.84 Measur Oscar	Gruene. Tr f Thornhill er level, 29 May 24 July 1 ements disc Preiss. Or er level, 1	wo and one in feet be 152.93 152.85 151.95 continued ne and one in feet be	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur	ring poin 151.82 152.50 153.17 Les south	est of Hur t, 1940 Oct. 29 Dec. 5	153.37 152.11
Jan. Feb. Mar. scho	278. s nor 23 27 22 281. 291.	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar Wat	Gruene. Tr f Thornhill er level, : Apr. 29 May 24 July 1 ements disc Preiss. Or er level, :	155.52  wo and one 1 school. in feet b 152.93 152.85 151.95  continued ne and one in feet b 56.14	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur July 29	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87	est of Hur t, 1940 Oct. 29 Dec. 5  east of Th	153.37 152.11 normhill
Jan. Feb. Mar. scho	278. s nor 23 27 22 281. 291. ol.	Nancy theast o. Wat 152.58 152.69 152.84 Measur Oscar: Wat 56.00 56.10	Gruene. Tr Gruene. Tr f Thornhill er level, and any 24 July 1 ements disc Preiss. Or er level, and any 28	155.52  wo and one 1 school. in feet b 152.93 152.85 151.95  continued ne and one in feet b 56.14 56.05	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur July 29 Aug. 27	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33	est of Hur t, 1940 Oct. 29 Dec. 5	153.37 152.11
Jan. Feb. Mar. scho	278. s nor 23 27 22 281. 291. ol.	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar Wat 56.00 56.10 56.19	Gruene. Tr f Thornhill er level, : Apr. 29 May 24 July 1 ements disc Preiss. Or er level, : Apr. 27 May 28 June 27	155.52  wo and one 1 school. in feet b 152.93 152.85 151.95  continued ne and one in feet b 56.14 56.05 55.68	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5	153.37 152.11 nornhill
Jan. Feb. Mar. scho Jan. Feb.	278. s nor 23 27 22 281. 291. ol. 24 27 22	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar Wat 56.00 56.10 56.19	Gruene. Tr Gruene. Tr f Thornhill er level, and any 24 July 1 ements disc Preiss. Or er level, and any 28	155.52  wo and one 1 school. in feet b 152.93 152.85 151.95  continued ne and one in feet b 56.14 56.05 55.68  r. Thirt;	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur July 29 Aug. 27	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5	153.37 152.11 nornhill
Jan. Feb. Mar. scho Jan. Feb.	278.s nor 23 27 22 281. 291. ol. 24 27 22 326. miles	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar: Wat 56.00 56.10 William southwe Wat	Gruene. Tro f Thornhill er level, Apr. 29 May 24 July 1 ements disc Preiss. Or er level, Apr. 27 May 28 June 27 m Schaeffer st of Solms er level,	wo and one of school. In feet be 152.93 152.85 151.95 continued the and one of school	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort	155.45 es southweing point 151.82 152.50 153.17 les south ring point 55.87 56.33 56.57 th of old ring point point ring point point ring ring ring ring ring ring ring ring	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5  U. S. Hight, 1940	153.37 152.11 normhill 56.58 55.95
Jan. Feb. Mar. scho Jan. Feb. Mar. Jan. Jan. Jan. Jan.	278.s nor 23 27 22 281. 291. ol. 24 27 22 326. miles	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar 56.00 56.10 William southwe Wat 38.47	Gruene. Tr f Thornhill er level, : Apr. 29 May 24 July 1 ements disc Preiss. Or er level, : Apr. 27 May 28 June 27 m Schaeffer st of Solms er level, :	155.52  wo and one of school. in feet be 152.93 152.85 151.95  continued the and one of school in feet be 156.14 56.05 55.68  r. Thirt; s. in feet be 39.94	Aug. 27 e-half mile elow measur July 26 Aug. 27 Sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5  U. S. Hight	153.37 152.11 nornhill 56.58 55.95 ghway 81,
Jan. Feb. scho Jan. Feb. Mar. Jan. Feb.	278.s nor 23 27 22 281. 291. ol. 24 27 22 326. miles	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar Wat 56.00 56.10 Willian southwe Wat 38.47 38.63	Gruene. Tr f Thornhill er level, a Apr. 29 May 24 July 1 ements disc Preiss. Or er level, a Apr. 27 May 28 June 27 m Schaeffer st of Solm er level, a Apr. 26 May 23	155.52  wo and one of school. in feet be 152.93 152.85 151.95  continued ne and one in feet be 56.14 56.05 55.68  r. Thirt; s. in feet be 39.94 40.05	Aug. 27 e-half mile elow measur July 26 Aug. 27 sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25 Aug. 28	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44 41.44	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5  U. S. Hight, 1940	153.37 152.11 normhill 56.58 55.95
Jan. Feb. Mar. scho Jan. Feb. Mar. Jan. Jan. Jan. Jan.	278. s nor 23 27 22 281. 291. 291. 326. miles	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar 56.00 56.10 Willias southwe Wat 38.47 38.63 39.52	Gruene. Tr f Thornhill er level, : Apr. 29 May 24 July 1 ements disc Preiss. Or er level, : Apr. 27 May 28 June 27 m Schaeffer st of Solms er level, : Apr. 26 May 25 June 21	155.52  wo and on 1 school. in feet b 152.93 152.85 151.95 continued ne and on in feet b 56.14 56.05 55.68  r. Thirt; in feet b 39.94 40.05 39.22	Aug. 27 e-half mile elow measur July 26 Aug. 27 sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25 Aug. 28 Sept.24	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44 41.44 41.64	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5  U. S. Hight	153.37 152.11 normhill 56.58 55.98 chway 81,
Jan. Feb. Scho Jan. Jan. Jan. Feb. Mar.	278. s hor 23 27 22 281. 291. oh. 24 27 22 326. 30 20 22 336.	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar Wat 56.00 56.19 William southwe Wat 38.47 38.63 39.52	Gruene. To f Thornhill er level, apr. 29 May 24 July 1 ements discovered by the second	155.52  wo and one of school. in feet be 152.93 152.85 151.95  continued ne and one in feet be 56.14 56.05 55.68  r. Thirt. s. in feet be 39.94 40.05 39.22 ridge po	Aug. 27 e-half mile elow measur July 26 Aug. 27 sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25 Aug. 28 Sept.24 int, about	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44 41.44 41.64	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5  U. S. Hight	153.37 152.11 normhill 56.58 55.98 chway 81,
mile Jan. Feb. Mar. Jan. Jan. Feb. Mar.	278. s hor 23 27 22 281. 291. oh. 24 27 22 326. 30 20 22 336.	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar 56.00 56.19 William southwe Wat 38.47 38.63 39.52 A. W.	Gruene. To f Thornhill er level, apr. 29 May 24 July 1 ements discovered by the second	155.52  wo and one of school. in feet be 152.93 152.85 151.95  continued ne and one in feet be 56.14 56.05 55.68  r. Thirt; s. in feet be 39.94 40.05 39.22 ridge po west of S	Aug. 27 e-half mile elow measur July 26 Aug. 27 sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25 Aug. 28 Sept.24 int, about	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44 41.64 500 feet	est of Hur t, 1940  Oct. 29 Dec. 5  east of Tr t, 1940  Oct. 28 Dec. 5  U. S. Hig t, 1940  Oct. 29 Dec. 4	153.37 152.11 normhill 56.58 55.98 chway 81,
Jan. Feb. Mar. scho Jan. 3.5 Jan. High	278. s nor 23 27 22 281. 291. ol. 24 27 22 326. miles 30 22 336. wway 8	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar 56.00 56.19 Willias southwe Wat 38.47 38.63 39.52 A. W.	Gruene. To f Thornhill er level, f Apr. 29 May 24 July 1 ements discovered by the second seco	155.52  wo and one of school. in feet be 152.93 152.85 151.95  continued ne and one in feet be 56.14 56.05 55.68  r. Thirt: s. in feet be 39.94 40.05 39.22 ridge po west of Sin feet be in	Aug. 27 e-half mile elow measur July 26 Aug. 27 sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25 Aug. 28 Sept.24 int, about elow measur	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44 41.64 500 feet ring poin	est of Hur t, 1940 Oct. 29 Dec. 5  east of Tr t, 1940 Oct. 28 Dec. 5  U. S. Hig t, 1940 Oct. 29 Dec. 4	153.37 152.11 nornhill 56.58 55.98 chway 81,
Jan. Feb. Scho Jan. Jan. Jan. Feb. Mar.	278. s nor  23 27 22 281. 291. 291. 326. miles 30 20 22 336. 30 30	Nancy theast of Wat 152.58 152.69 152.84 Measur Oscar 56.00 56.19 William southwe Wat 38.47 38.63 39.52 A. W.	Gruene. To f Thornhill er level, apr. 29 May 24 July 1 ements discovered by the second	155.52  wo and one of school. in feet be 152.93 152.85 151.95  continued ne and one in feet be 56.14 56.05 55.68  r. Thirt; s. in feet be 39.94 40.05 39.22 ridge po west of S	Aug. 27 e-half mile elow measur July 26 Aug. 27 sept.27 e-tenth mile elow measur July 29 Aug. 27 Sept.23 y feet nort elow measur July 25 Aug. 28 Sept.24 int, about	155.45 es southwring poin 151.82 152.50 153.17 les south ring poin 55.87 56.33 56.57 th of old ring poin 39.44 41.64 500 feet	est of Hur t, 1940  Oct. 29 Dec. 5  east of Tr t, 1940  Oct. 28 Dec. 5  U. S. Hig t, 1940  Oct. 29 Dec. 4	153.37 152.11 normhill 56.58 55.98 chway 81,

## Comal County -- Continued.

373. L. Jentsch. North side of U. S. Highway 81, 1 mile east of Solms.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Mar. 22 Apr. 26	26.91 26.44	May 23 Sept.24	27.50 28.52	Oct. 29	28.56

397. Perry Jones. North side of new U. S. Highway 81, and south side of old highway, 300 feet east of junction of old and new highways. Water levels, in feet below measuring point, 1940; Jan. 30, 186.29; May 23, 188.11; June 21, 188.05.

399. John Karback. One and thirty-five hundredths miles north of Gruene station.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24 Feb. 28 Mar. 22	176.99 177.77 177.15	Apr. 30 May 28 June 25	176.99 176.98 176.58	July 29 Aug. 27 Sept.23	176.27 176.81 177.30	Oct. 28 Dec. 6	177.54 176.88

## Crosby County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 1. C. E. Dean (formerly J. E. Rudell). In Cone. Water level, in feet below measuring point, 1940: Mar. 22, 114.20.
- 2. C. B. Travis. One and eighty-five hundredths miles south of Cone. Water levels, in feet below measuring point, 1940: Mar. 22, 107.17; Nov. 29, 107.08.
- 3. New Home School. Three and eighty-five hundredths miles south of Cone. Water levels, in feet below measuring point, 1940: Mar. 22, 135.84; Nov. 29, 135.52.
- 4. Six and seventy-five hundredths miles south of Cone. Water levels, in feet below measuring point, 1940: Mar. 22, 120.13; Nov. 29, 120.01.
  - 5. Measurements discontinued.
- 6. Miss D. M. Ralls. In Ralls. Water level, in feet below measuring point, 1940: Mar. 22, 121.91.
- 7. In Ralls. Water levels, in feet below measuring point, 1940; Mar. 22, 95.16; Nov. 29, 95.68.
  - 8. No measurements made in 1940.
- 9. East edge of Lorenzo. Water levels, in feet below measuring point, 1940: Mar. 22, 80.25; Nov. 29, 81.44.
- 46. J. R. Noble.  $SW_{\frac{1}{2}}^{1}SW_{\frac{1}{2}}^{1}$  J. F. Littlefield survey, 15 miles northwest of Crosbyton. Water level, in feet below measuring point, 1940: Mar. 22, 111.17; measurements discontinued.
- 337. W. E. McLaughlin. NW cor.  $NE_4^1$  sec. 925, blk. C-3, 14.5 miles west of Crosbyton. Water levels, in feet below measuring point, 1940: Mar. 22, 88.94; Nov. 29, 88.98.
- 338. W. E. McLaughlin. NW cor.  $NW_2^1$  sec. 925, blk. C-3, 15 miles west of Crosbyton. Water levels, in feet below measuring point, 1940: Mar. 22, 89.98; Nov. 29, 90.07.

#### Dallam County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

Ila. Dewey Decker. NW cor.  $SW_2^+$  sec. 4, blk. 2, 8 miles east of Texline. Used drilled irrigation well. Measuring point, top of  $\frac{1}{2}$ -inch hole in north side of pump base, 1.0 foot above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1939-40 Water Water Water Date Date Date level level level 45.78 Jan. 1939 46.10 Sept. 6, 1939 46.15 Apr. 12, 1940 Oct. 29 July Mar. 45.62 45.86 47.85 Aug. 20 Apr. 8 45.72 Nov. 17 45.75 47.85 B 45.64 Dec. 16 Jan. 24, 45.76 Sept.24 48.00 May July 0ct. 23 8 48.46 1940 45.90 48.00 10 Feb. 12 47,80 45,90 47.50 Dec. 45.70 47.55 Aug. 5 Mar. 18

14. Measurements discontinued.

16. M. R. Hay. SW cor.  $SE_4^1SE_4^1$  sec. 71, M. E. Hay subd., 6.5 miles east of Texline.

	Water leve	el, in fee	t below measuri	ng point,	1940
Jan. 24	32.00	Apr. 12	32.43	Dec. 6	32.81
Mar. 19	32.46	July 1	33.04	1	

19. B. M. Hay.  $SE_4^1SE_4^2$  sec. 60, M. E. Hay subd., 6 miles east of Texline. Water level, in feet below measuring point, 1940: Mar. 19, 61.58.

20. J. C. Doss. NW cor.  $NB_T^{\frac{1}{2}}$  sec. 69, M. E. Hay subd., 4.75 miles northeast of Texline. Water levels, in feet below measuring point, 1940: Feb. 12, 62.20; Mar. 19, 61.91; Apr. 12, 62.19; Dec. 6, 61.93.

20a. Shamberger. NE cor.  $SE_{\frac{1}{2}}SE_{\frac{1}{2}}$  sec. 68, M. E. Hay subd., 4 miles northeast of Texline. Unused drilled domestic and stock well, diameter 5 inches, depth 62 feet. Measuring point, top of casing on south side, 1.2 feet above land surface. Equipped with windmill.

Water level, in feet below measuring point, 1938-40 1938 51.95 Aug. 5, 1939 51.85 Apr. 12, 1940 51.70 Dec. 29, Mar. 9, 1939 8 51.89 Sept. 6 51.86 July 51.75 51.85 51.70 51.88 Oct. 29 Aug. 20 51.75 51.75 Apr. May Ω 51,90 Nov. 17 Sept.24 June 19 Dec. 16 51.70 51.75 51.86 Oct. 23 19, July 8 51.85 1940 51.65 52.54 Mar. Dec.

21. Mrs. S. H. Madden. SW cor.  $NW_2^1NW_2^1$  sec. 70, M. E. Hay subd., 5 miles east of Texline.

	Water level,	in feet	below measuring	g point,	1940
Jan. 24 Feb. 12	66.77 M 66.60 A		66.63 66.68	Dec. 6	66.89

36a. Art Decker.  $NW_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 1, blk. 2, 8.5 miles northeast of Texline.

water level, in leet below measuring point, 1940									
Date	Water level	Date	Water level	Date	Water level	Date	Water level		
Jan. 24 Feb. 12 Mar. 19	41.20 41.10 40.90	Apr. 12 July 1	41.05 42.56	Aug. 20 Sept.24	42.00 41.80	Oct. 23 Dec. 4	48.00 48.33		

40. J. M. French.  $NE_{\frac{1}{4}}^{\frac{1}{4}}$  sec. 3, F. D. W. subd., blk. 2, 9.5 miles east of Texline. Water level, in feet below measuring point, 1940: Dec. 6, 5.51.

#### Dallam County -- Continued.

- 41. Measurements discontinued.
- 42. T. L. Thompson. SW cor. sec. 5, blk. 3, 12.5 miles east of Texline.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 12 Mar. 18	12.20 11.68	Apr. 12 Aug. 20	11.50 13.00	Sept. 24 Oct. 23	13.55 13.35	Dec. 4	13.00

49. A. F. Harm.  $SE_{4}^{1}SE_{4}^{1}$  sec. 3, F. D. W. subd., blk. 2, 9.5 miles east of Texline.

Water level, in feet below measuring point, 1940 July 1 Aug. 20 Jan. 24 19.93 Mar. 18 19.91 20.55 Sept.24 21.80 Feb. 12 20.00 Apr. 12 19.93 21,80 Dec. (a)

- 52. Daniel Siedel. SE cor. SW $\frac{1}{4}$  sec. 5, F. D. W. subd., blk. 2, 3 miles east of Texline. Water levels, in feet below measuring point, 1940; Jan. 24, 39.32; Feb. 12, 39.20; Mar. 19, 41.45.
- 57. Dr. O. Powell. SW cor.  $SE_4^1$  sec. 8, F. D. W. subd., blk. 4, 10 miles east of Texline. Water levels, in feet below measuring point, 1940: Jan. 24, 25.57; Mar. 19, 25.43; Apr. 12, 25.34; July 1, 26.05.
  - 59. Measurements discontinued.
- 60. Draper School.  $NW_{4}^{1}NB_{4}^{1}$  sec. 2, F. D. W. subd., blk. 4, 11.5 miles northeast of Texline.

Water level, in feet below measuring point, 1940 Jan. 24 71.48 Apr. 12 71.60 Aug. 20 Sept.24 72,60 Oct. 23 71.70 Feb. 12 71.50 71.58 74.15 71.90 July Dec. Mar. 19 71.08

- 61. Burrows & Son. NW cor. sec. 7, F. D. W. subd., blk. 4, 10.5 miles east of Texline. Water levels, in feet below measuring point, 1940; Jan. 24, 25.43; Apr. 12, 25.73; Dec. 6, 26.13.
  - 63. Measurements discontinued.
  - 64. Measurements discontinued.
  - 65. Measurements discontinued.

67a. A. R. Pope. NE cor. NE $\frac{1}{4}$  sec. 4, F. D. W. subd., blk. 4, 13 miles east of Texline.

Water level, in feet below measuring point, 1940 Jan. 24 18.24 Apr. 12 17.46 Aug. 20 19.00 19.40 Oct. 23 Feb. 12 17.80 July 18.02 19.55 Dec. 19.30 1 Sept.24 19 17.56 Mar.

- 68. Measurements discontinued.
- 72. W. L. Cotton.  $NE_4^{\frac{1}{2}}NE_4^{\frac{1}{2}}$  sec. 1, F. D. W. subd., blk. 5, 8 miles east of Texline.

Water level, in feet below measuring point, 1940 Jan. 24 36.41 Mar. 19 35.99 Aug. 20 37.20 Oct. 23 37.45 Feb. 12 36.10 Apr. 12 35.94 Sept.24 37.35 Dec. 37.43

73. Martin Sewell.  $NE_4^1NW_4^1$  sec. 1, F. D. W. subd., blk. 5,  $7\frac{1}{8}$  miles east of Texline.

Water level, in feet below measuring point, 1940 Aug. 20 Sept.24 Jan. 24 40.40 39.45 Apr. 12 39.15 40.00 Oct. 23 Dec. Mar. 19 39.20 July l 39.60 40.25 40.73

a Filled to depth of 19.8 feet. Measurements discontinued.

# Dallam County -- Continued.

- 95. Measurements discontinued.
- 98. Measurements discontinued.
- 106. Measurements discontinued.
- 108. Measurements discontinued.
- 122. Church well. SE cor. sec. 13, C. S. S. subd., blk. 17, 22.5 miles east of Texline. Water levels, in feet below measuring point, 1940; Apr. 12, 43.72; Dec. 6, 43.82.
- 126. Ben Warkentin. SE cor. sec. 28, C. S. S. subd., blk. 17, 20.5 miles east of Texline. Water levels, in feet below measuring point, 1940; Apr. 12, 19.27; Dec. 6, 19.49.
- 130. I. I. Regier.  $SE_2^1SW_2^1$  sec. 17, C. S. S. subd., blk. 17, 18 miles east of Texline. Water levels, in feet below measuring point, 1940; Apr. 12, 16.53; Dec. 6, 17.61.
- 152. C. O. Hawk. NW cor. sec. 57, blk. 8, 16.5 miles southeast of Texline. Water levels, in feet below measuring point, 1940: Apr. 12, 247.30; Aug. 8, 247.06; Dec. 6, 246.86.
- 158. G. H. Gardets.  $NW_{4}^{1}SE_{4}^{1}$  sec. 77, C. S. S. subd., blk. 7, 4.75 miles southeast of Texline. Water levels, in feet below measuring point, 1940: Apr. 12, 72.59; Dec. 6, 72.38.
- 158a. At Corlena, 150 yards south and 150 yards west of railroad crossing. Unused drilled stock well, diameter 4½ inches, depth 106 feet. Measuring point, top of casing on west side, 0.5 foot above land surface. Equipped with windmill. Water levels, in feet below measuring point: Mar. 8, 1939, 74.17; Apr. 12, 1940, 74.47; Aug. 8, 1940, 74.03; Dec. 6, 1940, 73.96.
- 159. L. E. Paige. SE cor. NE sec. 83, C. S. S. subd., blk. 7, 3.25 miles southeast of Texline. Water levels, in feet below measuring point, 1940: Apr. 12, 69.02; Aug. 8, 69.37; Dec. 6, 69.80.
- 234. Ware Public School. In Ware. Water level, in feet below measuring point, 1940: Dec. 6, 275.20.
- 241. J. F. Shellenberg. NW cor. sec. 30, C. S. S. subd., blk. 18, 26.5 miles north of Dalhart. Water levels, in feet below measuring point, 1940: Apr. 12, 51.54; Dec. 6, 51.60.
- 243. A. P. Epp. SE cor. sec. 2, blk. 18, 28 miles north of Dalhart. Water levels, in feet below measuring point, 1940; Apr. 12, 34.96; Dec. 6, 34.65.
  - 248. Measurements discontinued.
  - 289. No measurements made in 1940.
- 319. Conlen Public School. In Conlen. Water level, in feet below measuring point, 1940: Aug. 8, 257.81. Measurements discontinued.
- 367. Price, Dawson & Fuqua. NEINE1 sec. 25, C. S. S. subd., blk. 1, 6 miles north of Dalhart. Water level, in feet below measuring point, 1940: Apr. 12, 261.59. Measurements discontinued.
- 376. Hale and Parks.  $SE_4^2NW_4^2$  sec. 12, Capitol Syndicate subd., blk. 2, 10.5 miles northwest of Dalhart. Water levels, in feet below measuring point, 1940: Apr. 12, 247.29; Aug. 8, 246.92; Dec. 6, 247.54.
- 377. E. Ashby.  $NE_{2}^{1}SW_{2}^{1}$  sec. 3, blk. 2, 8.5 miles northwest of Dalhart. Water levels, in feet below measuring point, 1940: Apr. 12, 207.58; Dec. 6, 206.80.
- 384. O. F. Salasky.  $SW_2^1SW_2^1$  sec. 31, B. & B. subd., blk. 2, 5.5 miles west of Dalhart. Water levels, in feet below measuring point, 1940: Apr.12, 200.55; Aug. 8, 199.97; Dec. 6, 199.76.
  - 386. No measurements made in 1940.

#### Dawson County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

9. I. M. Stafford. NE cor.  $SE_4^1$  sec. 41, blk. 35, T. 5 N., 6.6 miles southeast of Lamesa on U. S. Highway 87, thence 1.4 miles west. Unused drilled stock and domestic well, diameter 6 inches, depth 86 feet. Measuring point, top of pipe clamp on south side, 0.6 foot above land surface. Equipped with windmill.

	Water level	, in feet	below	measuring	point, 1938-40	
Date	Water level	Date		Water level	Date	Water level
Apr. 29, 19 Jan. 23, 19		Aug. 10, Aug. 2,		81.36 81.40	Nov. 25, 1940	81,15

- 601. Panhandle & Santa Fe Railway Company. NW1NB1 sec. 71, blk. 35, T. 6 N., 1.5 miles north of Lamesa. Water level, in feet below measuring point, 1940: Mar. 1, 107.68. Measurements discontinued.
- 602. Owner unknown. Swissi sec, 44, blk. 35, T. 6 N., 1.6 miles north of Lamesa and 0.45 miles west of U. S. Highway 87. Water levels, in feet below measuring point, 1940: Mar. 1, 89.78; Aug. 2, 89.94.
  - 603. No measurements made in 1940.
- 606. Gus White.  $SE_4^1$  sec. 13, blk. 35, T. 6 N., 7.4 miles north of Lamesa on U. S. Highway 87, thence 0.8 mile west on dirt road. Water levels, in feet below measuring point, 1940: Mar. 1, 100.2; Aug. 2, 100.54; Nov. 25, 99.81.
- 607. Gus White. NEt sec. 13, blk. 35, T. 6 N., 7.4 miles north of Lamesa on U. S. Highway 87 thence 0.1 mile north. Water level, in feet below measuring point, 1940: Mar. 1, 86.20.
- 611. V. B. Hohn. Eleven and six-tenths miles northeast of Lamesa at Hindman Switch. Water level, in feet below measuring point, 1940: Mar. 1, 52.32.
- 612. SE cor. SE sec. 6, blk. 34, 12.4 miles northeast of Lamesa and 0.2 mile west of U.S. Highway 87. Water levels, in feet below measuring point, 1940: Aug. 2, 78.56; Nov. 25, 78.38.
- 614. Texas Highway Department. On east side of U. S. Highway 87 right-of-way, 15.4 miles northeast of Lamesa. Water levels, in feet below measuring point, 1940: Mar. 1, 47.94; Aug. 2, 48.68; Nov. 25, 48.56.
- 702. Mrs. W. H. Gartin.  $NW_2$  sec. 46, blk. 34, T. 4 N., 2.6 miles northwest of Ackerly. Water levels, in feet below measuring point, 1940: Mar. 1, 100.08; Nov. 25, 99.63.
- 705. L. Simpson. Near center of sec. 18, blk. 34, T. 4 N., on east side of U. S. Highway 87, 8.5 miles northwest of Ackerly. Water level, in feet below measuring point, 1940: Nov. 25, 96.08.
- 706. H. Richardson. SE cor. SE2 sec. 12, blk. 35, T. 4 N., on east side of U. S. Highway 87, 9.2 miles northwest of Ackerly. Measurements resumed. Water levels, in feet below measuring point, 1940: Aug. 2, 84.86; Nov. 25, 83.95.
- 707. R. Huff.  $SE_4^1SW_4^1$  sec. 7, blk. 34, T. 4 N., 0.3 mile east of U. S. Highway 87, 9.2 miles northwest of Ackerly. Water levels, in feet below measuring point, 1940: Mar. 1, 85.15; Aug. 2, 85.24; Nov. 25, 85.20.
- 708. V. O. Barron. About 600 feet northeast of intersection of dirt road and U. S. Highway 87, 9.1 miles southeast of Lamesa. Water levels, in feet below measuring point, 1940: Mar. 1, 133.07; Aug. 2, 133.50; Nov. 25, 133.42.
- 709. Truett Shipley. SW cor. SW sec. 47, blk. 35, T. 5 N., 0.8 mile west of U. S. Highway 87, 9.1 miles southeast of Lamesa. Water level, in feet below measuring point, 1940: Nov. 25, 66.13.

#### Dawson County -- Continued.

- 710. 0. Williams.  $NE_2^1$  sec. 3, blk. 35, T. 4 N., 1.2 miles west of U. S. Highway 87, 9.1 miles southeast of Lamesa. Water level, in feet below measuring point, 1940: Nov. 25, 52.48.
- 711. Dan Bartlett. NEINW sec. 3, blk. 35, T. 4 N., 1.6 miles west of U. S. Highway 87, 9.1 miles southeast of Lamesa. Water levels, in feet below measuring point, 1940: Aug. 2, 82.28; Nov. 25, 82.19.
- 712. H. H. Barron. Near center of sec. 33, blk. 35, T. 5 N., 3.2 miles southeast of Lamesa on U. S. Highway 87 thence 2.4 miles south on dirt road and 0.35 mile east in field. Measurements resumed. Water levels, in feet below measuring point, 1940: Mar. 1, 79.05; Aug. 2, 79.06; Nov. 25, 78.91.
- 713. Elmer Walls.  $SW_{2}^{1}SE_{2}^{1}$  sec. 21, blk. 35, T. 5 N., 0.1 mile east of U. S. Highway 87, 4.2 miles southeast of Lamesa. Water level, in feet below measuring point, 1940: Aug. 2, 95.44.
- 714. H. H. Barron. NEINEI sec. 29, blk. 34, T. 5 N., 3.2 miles southeast of Lamesa, on U. S. Highway 87, thence 0.95 mile south on dirt road. Water levels, in feet below measuring point, 1940: Mar. 1, 72.06; Aug. 2, 71.96; Nov. 25, 71.87.
  - 716. Measurements discontinued.
- 718. J. E. Garland. North city limits of Lamesa on U. S. Highway 87 and 0.1 mile west. Water levels, in feet below measuring point, 1940: Mar. 1, 90.82; Aug. 2, 91.19; Nov. 25, 91.17.
  - 719. Measurements discontinued.
  - 720. No measurements made in 1940.

#### Deaf Smith County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
  - 51. Well filled; measurements discontinued.
  - 53. Well filled; measurements discontinued.
- 54. Texas Loan and Mortgage Company. Sw\subseteq Sec. 25, blk. K-7, 15.5 miles north of Hereford. Water level, in feet below measuring point, 1940: Mar. 20, 161.24.
- 113. A. S. Higgins. NW cor.  $NW_{4}^{1}NW_{4}^{1}$  sec. 58, blk. K-4, 12.5 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 98.73; Nov. 8, 98.83.
- 127. Federal Life Ins. Company. SE\( 28\) sec. 36, blk. 7, 18 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 74.38; July 24, 74.30.
- 128. M. H. Byrum.  $SW_{\frac{1}{2}}SE_{\frac{1}{2}}$  sec. 36, blk. 7, 18 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 20, 25.45.
  - 144. Filled; measurements discontinued.
  - 148. Measurements discontinued.
- 150. D. Thompson.  $SE_{4}^{1}SE_{4}^{1}$  sec. 79, blk. K-4, 10.5 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 96.84; Nov. 8, 98.29.
  - 201. Measurements discontinued.
  - 205. Measurements discontinued.
- 207. R. Schroeler. West line of NW1SW1 sec. 12, blk. K-3, 9 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 54.97; Nov. 8, 56.06.
- 212. Alfred May. NW cor.  $NE_4^1NW_4^1$  sec. 16, blk. 3, 12 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Nov. 8,
- 216. H. H. Miller. SW cor. SE sec. 14, blk. 3, 13 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Nov. 8, 71.62.

# Deaf Smith County -- Continued.

- 217. W. E. Neal. SEINW sec. 21, blk. 3, 13 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 20, 91.61.
- 219. J. E. Manz. NEINW sec. 11, blk. 3, 14 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 76.83; Nov. 8, 79.88.
- 220. C. T. Wimberley. SW cor. SW $\frac{1}{2}$  sec. 22, blk. 3, 11.5 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 19, 85.66.
- 224. M. H. Burum. SE cor. NE<sub>4</sub>SE<sub>4</sub> sec. 25, blk. 3, 10 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Nov. 8, 57.83.
- 226. J. B. Stoker. NW cor.  $NW_2^4NE_4^2$  sec. 7, blk. K-3, 9 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 19, 51.13.
- 230. E. C. Reineaur. NW cor.  $SW_{4}^{1}$  sec. 6, blk. K-3, 7.5 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 47.49; Nov. 7, 50.49.
- 234. Sec. 534, excess acreage strip, 7.75 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Nov. 8, 53.04.
- 235. W. G. Slagle. SW1SE1 sec. 5, blk. K-3, 7 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 53.74; Nov. 7, 55.88.
- 236. Western National Bank. SW cor.  $SW_4^1$  sec. 5, blk. K-3, 6.4 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 48.14; July 24, 48.68; Nov. 7, 49.37.
- 237. Western National Bank. NW cor.  $NW_4^1$  sec. 5, blk. K-3, 7 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 45.16; Nov. 7, 48.91.
- 241. J.K. Estes. NW cor. NW1NW1 sec. 17, blk. K-3, 5.5 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 47.52; Nov. 7, 48.46.
- 242. Travis Damron. NW cor.  $SW_{4}^{1}$  sec. 24, blk. K-3, 4.5 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 19. 50.75.
- 245. A. D. Smith. SW cor.  $NW_2^1NW_4^1$  sec. 25, blk. K-3, 5.5 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 44.73; Nov. 7, 56.39.
- 247.  $NB_4^1NB_4^1$  sec. 34, blk. K-3, 7.5 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 19, 23.76.
- 248.  $NE_2^1NW_2^1$  sec. 34, blk. K-3, 7 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 45.65; July 23, 45.90; Nov. 8, 46.34.
- 251. A. D. Thompson and Blakemore. The most southwesterly of 3 wells. NW cor.  $SW_2^1NW_2^1$  sec. 47, blk. K-3, 6.5 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 49.86; Nov. 8, 53.19.
- 258. Dr. G. W. Heard. SW cor.,  $NE_2^1$  sec. 77, blk. K-3, 3 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 55.68; Nov. 8, 57.97.
  - 260. Measurements discontinued.
- 261. D. L. McDonald. NW cor.  $NW_{4}^{1}NW_{4}^{1}$  sec. 65, blk. K-3, 4 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 52.76; Nov. 8, 55.77.
  - 264. Measurements discontinued.
- 265. Reineaur Bros. NW cor.  $SE_2^1$  sec. 74, blk. K-3, 6 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 65.16; Nov. 8, 76.08.

## Deaf Smith County -- Continued.

- 272. Empire Mortgage Company. SW cor. SE\(\frac{1}{2}\)SW\(\frac{1}{2}\) sec. 86, blk. K-3, 5 miles northwest of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 70.14; Nov. 8, 73.19.
- 276.  $SW_{2}^{1}SW_{2}^{1}$  sec. 69, blk. K-3, 7.5 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 39.98; Oct. 29, 40.86.
- 277. H. H. Myers.  $SE_2^{\dagger}SE_2^{\dagger}$  sec. 72, blk. K-3, 7.5 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 24.75; July 23, 25.01; Oct. 29, 25.33; Nov. 8, 25.51.
  - 278. Measurements discontinued.
- 281. P. H. Filbin.  $NW_4^1NW_4^1$  sec. 96, blk. K-3, 5.5 miles northwest of Hereford. Water level, in feet below measuring point, 1940: Mar. 20, 67.44.
- 283. J. T. Gilbreath. North line of  $NW_2^1NE_2^1$  sec. 133, blk. M-7, 3 miles west of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 64.65; Nov. 8, 70.74.
- 288. John W. Kropff.  $NW_{2}^{1}NW_{3}^{1}$  sec. 63, blk. K-3, 2.5 miles north of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 65.00; Nov. 8, 72.63.
- 291. S. L. Harman. NW cor.  $NW_4^1$  sec. 59, blk. K-3,1 mile northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 55.77; Nov. 7, 59.33.
  - 299. Measurements discontinued.
- 300. SW1SW1 sec. 43, blk. K-3, 2 miles northeast of Hereford. Water level, in feet below measuring point, 1940: Mar. 19, 48.62.
- 301. SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)Sec. 43, blk. K-3, 2.6 miles northeast of Hereford. Water levels, in feet below measuring point, 1940; Mar. 19, 48.08; Nov. 7, 49.93.
- 302. J. L. Fuqua. NELSEL sec. 39, blk. K-3, 4 miles northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 54.19; Nov. 7, 55.67.
- 308. Hereford State Park. NW cor.  $NE_{\overline{k}}NE_{\overline{k}}$  sec. 60, blk. K-3, l mile northeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 49.55; July 23, 50.30; Nov. 7, 51.42.
- 311. H. H. Boardman. SW cor.  $SE_{4}^{1}SW_{4}^{1}$  sec. 41, blk. K-3, 2 miles east of Hereford. Water level, in feet below measuring point, 1940: Mar. 19, 51.70.
- 315. C. P. Hussey.  $SW_{2}^{1}NE_{2}^{1}$  sec. 67, blk. M-7, 3.5 miles east of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 55.92; Nov. 7, 60.18.
- 317. L. Baskin. SW cor. SE½SE½ sec. 110, blk. M-7, 1.6 miles south of courthouse, in Hereford. Water level, in feet below measuring point, 1940: Oct. 29, 68.32.
- 319. Hooker Estate. SW cor.  $SE_4^2NE_4^1$  sec. 79, blk. K-3, 1 mile northwest of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 61.58; Nov. 8, 62.85.
- 322. Lloyd Edwards. SW cor.  $SE_2^1$  sec. 112, blk. M-7, 2.5 miles south of Hereford. Water levels, in feet below measuring point, 1940; Mar. 19, 73.26; Oct. 29, 75.84; Nov. 7, 75.56.
- 326. SW cor. SW2SW2 sec. 114, blk. M-7, 5 miles south of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 91.76; Nov. 7, 95.53.
- 331. M. C. Doss. SW cor.  $NW_2^1$  sec. 107, blk. M-7, 4 miles south of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 81.37; Nov. 7, 83.57.
- 336. E. J. Boeskin. SW cor.  $NE_2^1$  sec. 86, blk. M-7, 3.5 miles southeast of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 87.54; Nov. 7, 88.74.
- 340. Felix Urbanczyk. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 108, blk. M-7, 3.75 miles south of Hereford. Water level, in feet below measuring point, 1940: Nov. 7, 86.04.

# Deaf Smith County -- Continued.

- 342. Felix Urbanczyk.  $NE_{2}^{1}SE_{2}^{1}$  sec. 108, blk. M-7, 3.5 miles south of Hereford. Water levels, in feet below measuring point, 1940: Mar. 19, 76.48; Nov. 7, 82.09.
- 410. J. H. Weems. SE cor.  $SE_2^{1}SE_2^{1}$  sec. 36, blk. K-8, 8 miles northwest of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 65.02; Nov. 8, 66.40.
- 431. Mrs. M. Wooldridge.  $NE_{4}^{1}NE_{4}^{1}$  sec. 152, blk. M-7, 4.5 miles southwest of Hereford. Water level, in feet below measuring point, 1940: Nov. 8, 72.50.
  - 433. Measurements discontinued.
- 502. M. S. Tannahill.  $NW_{2}^{1}NW_{2}^{1}$  sec. 50, blk. K-8, 8.5 miles west of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 96.23; Nov. 8, 103.08.
- 506. Alton Fraser.  $NW_{4}^{1}NW_{4}^{1}$  sec. 5, Gregg County School Land, 9 miles west of Hereford. Water level, in feet below measuring point, 1940: Mar. 20. 75.30.
- 513. W. L. Parrott. SW\(\frac{1}{4}\)SW\(\frac{1}{4}\) sec. 174, blk. M-7, 7.5 miles southwest of Hereford. Water level, in feet below measuring point, 1940: Mar. 20, 79.89.
  - 514. Measurements discontinued.
- 519. J. G. Evans.  $SW_2^1SW_2^1$  sec. 25, Gregg County School Land, 10 miles west of Hereford. Water levels, in feet below measuring point, 1940: Mar. 20, 86.35; Nov. 8, 86.63.

## Dimmit County

Well numbers correspond to those in Water-Supply Papers 777, 840, 845, and 886.

M9-9. Meyers. Two and one-half miles southwest of Cometa. Water level, in feet below measuring point: Aug. 14, 1939, 85.30; no measurements made in 1940.

N7-25. Mrs. Ella Perrin. Four and one-quarter miles southeast of Cometa. Unused drilled irrigation well, diameter 6 inches, depth 350 feet. Measuring point, top of casing, set in concrete block inside 6 feet high concrete sump tank, 1.0 foot above land surface.

Water level, in feet below measuring point, 1930, 1937-1940 Water Water Water Date Date Date level level level May 14,1930 53.30 Jan. 11, 1938 54.20 July 19, 1939 57.52 July 14,1937 53,13 Aug. 24 55.12 Aug. 13 56.82 6, 2, Aug. Aug. 15 56,60 Apr. 1939 64.09 1940

N7-34. A. Johnson. Two miles northwest of Winter Haven. Water levels, in feet below measuring point: Aug. 16, 1939, 45.24; July 31, 1940, 34.53.

N7-48. H. Hagelstein. One mile east of Winter Haven. Water levels, in feet below measuring point: Aug. 12, 1939, 46.67; Aug. 1, 1940, 32.19.

N7-53. Measurements discontinued.

N7-78. C. Schmitt. Two miles northwest of Carrizo Springs. Water levels, in feet below measuring point: Aug. 13, 1939, 104.92; Aug. 2, 1940, 104.32.

N7-95. M. E. Cook. Three miles west of Carrizo Springs. Water levels, in feet below measuring point: Aug. 13, 1939, 74.98; Aug. 2, 1940, 74.67.

N7-125. J. Gardner. Carrizo Springs. Water levels, in feet below measuring point: Aug. 13, 1939, 66.51; Aug. 2, 1940, 66.97.

#### Dimmit County -- Continued.

- N7-127. Measurements discontinued.
- N7-135. J. L. Bell. Two miles southwest of Carrizo Springs. Water levels, in feet below measuring point: Aug. 12, 1939, 32.03; Dec. 9, 1939, 32.03; Aug. 2, 1940, 32.40.
- N8-19. Hill and Morton. Two miles southeast of Winter Haven. Water levels, in feet below measuring point: Aug. 12, 1939, 79.64; Aug. 1, 1940, 69.33.
- N8-26. Charles Dunn. Four miles southeast of Winter Haven. Water levels, in feet below measuring point: Aug. 16, 1939, 53.48; July 31, 1940, 37.97.
- N8-28. J. C. Brazil. Four miles southeast of Winter Haven. Water levels, in feet below measuring point: Aug. 16, 1939, 53.86; July 31, 1940, 38.16.
- N8-29. J. C. and O. E. Bookout. Four and one-half miles southeast of Winter Haven. Water level, in feet below measuring point, 1939: Aug. 16, 53.07. No measurements made in 1940.
- N8-40. M. V. Kerley. Three miles northeast of Carrizo Springs. Water levels, in feet below measuring point: Aug. 12, 1939, 34.89; Aug. 1, 1940, 43.34.
- N8-47. C. W. Miller. Two miles east of Carrizo Springs. Water levels, in feet below measuring point: Aug. 11, 1939, 85.08; Dec. 11, 1939, 90.18; July 30, 1940, 83.96.
- N8-50. R. H. Price. Three miles east of Carrizo Springs. Water levels, in feet below measuring point: Aug. 11, 1939, 65.00; Dec. 11, 1939, 66.73; July 30, 1940, 56.90.
- N8-58. G. & C. Hagelstein. Six miles northeast of Carrizo Springs. Water levels, in feet below measuring point: Aug. 11,1939, 40.47; Dec. 11, 1939, 42.18; July 30, 1940, 26.06.
- N8-71. S. M. Owens. Five miles southwest of Brundage. Water levels, in feet below measuring point: Aug. 11, 1939, 41.85; July 30, 1940, 25.31.
- N8-73. C. W. Wheeler. Two miles southwest of Brundage. Water level, in feet below measuring point, 1939: Aug. 15, 32.61. No measurements made in 1940.
- N8-103. Nueces Land & Irrigation Company. Four miles southwest of Brundage. Water levels, in feet below measuring point: Aug. 15, 1939, 32.42; Dec. 8, 1939, 27.73; Aug. 3, 1940, 12.94.
- N9-8. T. S. Buchanan. One and one-half miles north of Big Wells. Water levels, in feet below measuring point: Aug. 11, 1939, 57.28; July 30, 1940, 49.67.
- N9-12. R. J. Rothe. One mile west of Big Wells. Water levels, in feet below measuring point: Aug. 11, 1939, 21.67; Dec. 11, 1939, 20.71; July 30, 1940, 11.41.
- N9-16. R. B. White Co. One and one-half miles east of Big Wells. Water level, in feet below measuring point, 1939: Aug. 11, 68.73. No measurements made in 1940.
- N9-25. South Texas Estates. Four miles southeast of Brundage. Water level, in feet below measuring point, 1940: July 30, 6.15.
- N9-32. P. J. Lewis. Two and one-half miles south of Big Wells. Water levels, in feet below measuring point: Aug. 11, 1939, 28.88; July 30, 1940, 18.68.
- N9-33. P. J. Lewis. In county road, 2.5 miles south of Big Wells. Used drilled domestic well, diameter 6 inches, depth 1,523 feet. Measuring point, top of casing, 1.0 foot above land surface. Equipped with windmill.

# Dimmit County -- Continued.

#### N9-33. -- Continued.

Water	level.	in	feet	below	measuring	point.	1932.	1936-40

Date	Water level	Date	Water level	Date	Water level
Aug. 21, 1932	16.50	Aug. 17, 1937	35.44	July 18, 1939	26.94
Dec. 22	14.26	Jan. 15, 1938	23.98	Aug. 11	28.13
Aug. 24, 1936	36.02	Aug. 22	36.28	Dec. 11	24.58
July 10, 1937	22.11	Apr. 9, 1939	43.56	July 30, 1940	17.59

- 07-3. Wimar-Richardson. Nine miles northwest of Big Wells. Water levels, in feet below measuring point: Aug. 11,1939, 99.67; July 30, 1940, 94.61.
- S1-15. South Texas Winter Gardens, Inc. Six miles southwest of Carrizo Springs. Water levels, in feet below measuring point: Aug. 12, 1939, 56.40; Aug. 2, 1940, 56.64.
- Sl-16. C. W. Gilfillen and Son. Four and one-half miles southwest of Carrizo Springs. Water levels, in feet below measuring point: Aug. 12, 1939, 59.61; Dec. 9, 1939, 59.72; Aug. 2, 1940, 59.63.
- S1-18. South Texas Winter Gardens, Inc. Three and one-half miles southwest of Carrizo Springs. Water levels, in feet below measuring point: Aug. 12, 1939, 106.94; Dec. 9, 1939, 107.06; Aug. 2, 1940, 106.90.
- S2-24. L. V. Richardson. Five and one-half miles southeast of Carrizo Springs. Water levels, in feet below measuring point: Aug. 13, 1939, 99.69; Dec. 9, 1939, 108.05; Aug. 3, 1940, 97.57.
- S2-27. J. A. McDonald. Three and one-half miles northeast of Asherton. Water levels, in feet below measuring point, 1939: Aug. 11, 57.50; Dec. 8, 55.43. No measurements made in 1940.
- S2-29. E. W. Tackett. Four miles northwest of Asherton. Water levels, in feet below measuring point: Aug. 12, 1939, 73.74; Dec. 9, 1939, 82.12; Aug. 3, 1940, 68.29.
  - S2-77. Measurements discontinued.
- S2-78. J. W. Robinson. Two and one-half miles southwest of Asherton. Water levels, in feet below measuring point: Aug. 15, 1939, 158.52; Dec. 10, 1939, 165.46; Aug. 3, 1940, 145.73.
- S2-86. E. Hess. Four miles southeast of Asherton. Water levels, in feet below measuring point: Aug. 15, 1939, 127.33; Aug. 3, 1940, 122.87
- S2-91. L. Zaunbrecher. Five miles south of Asherton. Water levels, in feet below measuring point: Aug. 15, 1939, 139.56; Aug. 4, 1940, 138.96.
- S2-94. A. J. Frey. Nine miles west of Catarina. Water levels, in feet below measuring point: Aug. 15,1939, 176.51; Aug. 4, 1940, 171.78.
- S2-102. J. P. Giles. Four miles northwest of Catarina. Water levels, in feet below measuring point: Aug. 15, 1939, 111.08; Dec. 8, 1939, 111.07; Aug. 3, 1940, 104.80.
- S3-10. G. W. Taggert. Four and one-half miles northeast of Catarina. Water levels, in feet below measuring point: Aug. 15,1939, 74.46; Aug. 3, 1940, 65.84.
- S3-16. Catarina Farms Company. Two and one-half miles west of Catarina. Unused drilled irrigation well, diameter 10 inches. Measuring point, top concrete curb around casing, 1.5 feet above land surface.

		Wa	ter level,	in f	eet	pelom	measuring	point,	193	6-40	
Aug. July	27.	1936	138.80	Jan.	13,	1938	131.55	July	15,	1939	133.41
July	13.	1937	129.24	Aug.	25		133.64	Aug.	15		134.11
Aug.	14		135.82	Apr.	8,	1939	140.56	Aug.	3,	1940	126.32

# Dimmit County -- Continued.

- S5-3. Ingram & Eckler. Six miles east of Catarina. Water levels, in feet below measuring point: July 16, 1939, 103.88; Aug. 15, 1939, 104.10; Aug. 4, 1940, 97.62.
- S5-5. Claude Lindley. Thirteen miles southwest of Catarina. Water levels, in feet below measuring point: Aug. 15, 1939, 67.64; Aug. 4, 1940, 67.38.
- S5-10. Watson. Five miles southwest of Catarina. Water level, in feet below measuring point, 1939: Aug. 15, 82.37. No measurements made in 1940.
- S6-4. C. V. Ray. One and one-half miles southeast of Catarina. Water levels, in feet below measuring point: Aug. 15, 1939, 11.71; Dec. 8, 1939, 10.39; Aug. 3, 1940, 5.09.
- T1-5. Flecher. Two and one-quarter miles east of Valley Wells. Water levels, in feet below measuring point: Aug. 11, 1939, 7.95; July 30, 1940, 1.79.

# Duval County

- Well numbers correspond to those in Water-Supply Papers 776, 777, 840, 845, and 886.
- 55. L. N. Garcia. Three and seven-tenths miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 56.35.
- 59. Candeladio Cuellar. Six miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 63.10.
- 61. Jose M. Sepulyida. Seven miles northwest of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 45.40.
- 68. Cantu Estate. Nine miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 60.06.
- 69. Juan Peralez. Nine miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 73.26.
- 70. M. Cantu. Ten and four-tenths miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 52.11.
- 71. Helena de Pena. Eleven and two-tenths miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 43.13.
- 72. Cecilio Valerio. Twelve miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 37.74.
- 73. Severo Ranjel. Eleven miles west of San Diego. Water level, in feet below measuring point, 1940: Feb. 12, 37.67.
- 143. Salidonia Ruiz. In Benavides. Water level, in feet below measuring point, 1940: Feb. 13, 41.38.
- 144. Pete Coronada. In Benavides. Water level, in feet below measuring point, 1940: Feb. 13, 41.64.
- 145. T. Ramirez. In Benavides. Water level, in feet below measuring point, 1940: Feb. 13, 42.14.
- 157. Francisco Vaello. Two and one-half miles southwest of Benavides. Water level, in feet below measuring point, 1940: Feb. 14, 92.25.
- 158. Marco Gomez. One and three-quarters miles southwest of Benavides. Water level, in feet below measuring point, 1940: Feb. 13, 96.31.
- 173. Ismael Garcia. Two and one-third miles east of Benavides. Water level, in feet below measuring point, 1940: Feb. 13, 51.57.
- 175. Mrs. Tom Cavenaugh. One mile east of Benavides. Water level, in feet below measuring point, 1940: Feb. 13, 43.98.

## Duval County -- Continued.

- 183. Lazaro Vela. Eight miles south of San Diego. Water level, in feet below measuring point, 1940: Feb. 13, 54.53.
- 184. Eusebic Alamis. Seven and one-half miles south-southwest of San Diego. Water level, in feet below measuring point, 1940: Feb. 13, 46.53.
- 185. Cervando Saenz. Ten miles south of San Diego. Water level, in feet below measuring point, 1940: Feb. 13, 36.28.
- 187. Ranchita Anjerlina. Ten and one-half miles south of San Diego. Water level, in feet below measuring point, 1940: Feb. 13, 44.46.
- 188. Encarnacion Pena. One mile north of San Jose. Water level, in feet below measuring point, 1940: Feb. 13, 76.06.
- 189. Pedro Lopez. At San Jose, 13 miles south of San Diego. Water level, in feet below measuring point, 1940: Feb. 13, 62.20.
- 190. Margarita Lopez. One half mile south of San Jose. Water level, in feet below measuring point, 1940: February 13, 45.44.
- 201. Maria Villareal de Saenz. One and one-fourth miles north of Santa Cruz. Water level, in feet below measuring point, 1940: Feb. 13, 75.86.
- 203. N. E. Martinez. In Santa Cruz. Water level, in feet below measuring point, 1940: Feb. 13, 51.75.
- 204. Hilario Saenz. One mile south of Santa Cruz. Water level, in feet below measuring point, 1940: Feb. 13, 67.14.
- 207. Guadalupe Silva Salinas. Two miles east of Conception. Water level, in feet below measuring point, 1940: Feb. 13, 54.70.
- 209. W. S. Evans. In Conception. Water level, in feet below measuring point, 1940: Feb. 13, 39.25.
- 211. J. Perez. One and one-third miles north of Conception. Water level, in feet below measuring point, 1940: Feb. 13, 41.60.
- 230. San Antonio Loan and Trust Company. Three and one-half miles south of Realitos. Water level, in feet below measuring point, 1940; Feb. 13, 65.67.
- 240. Gus Minges. One and one-half miles northeast of Realitos. Water level, in feet below measuring point, 1940; Feb. 13, 95.90.
- 271. J. Mann. Five and one-half miles south-southeast of Realitos. Water level, in feet below measuring point, 1940: Feb. 13, 76.25.
- 276. Herman Damier. Ten and one-fourth miles south of Realitos. Water level, in feet below measuring point, 1940: Feb. 14, 39.98.
- 287. Virginia J. Ramidez. Four miles southwest of Conception. Water level, in feet below measuring point, 1940: Feb. 13, 49.56.
- 289. Adolfo Garcia. Three and one-fourth miles northeast of Sejita. Water level, in feet below measuring point, 1940; Feb. 13, 46,66.
- 290. Andalasia Garcia. Javelina pasture, 3 miles northeast of Sejita. Water level, in feet below measuring point, 1940: Feb. 13, 51.95.
- 292. Raphael Flores. One mile east of Sejita. Water level, in feet below measuring point, 1940: Feb. 13, 32.80.
- 297. San Antonio Loan and Trust Company. Six and one-half miles south-southeast of Sejita. Water level, in feet below measuring point, 1940: Feb. 14, 53.59.
- 301. Virginia Garcia. Five miles south of Conception. Water level, in feet below measuring point, 1940: Feb. 13, 52.77.
- 302. Rafael Garcia. Four and one-half miles south of Conception. Water level, in feet below measuring point, 1940: Feb. 13, 33.01.

#### Duval County -- Continued.

- 304. Rafael Garcia. Three miles south of Conception. Water level, in feet below measuring point, 1940: Feb. 13, 53.67.
  - 315. No measurements made in 1940.
  - 319. No measurements made in 1940.
- 322. Santone Hinojosa. Three-fourths mile east of La Copita. Water level, in feet below measuring point, 1940: Feb. 14, 39.63.

# Ector County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 68. H. C. Barrow Estate.  $SE_2^{1}NW_2^{1}$  sec. 15, blk. 42, T. I.S., about 0.3 mile east of State Highway 51, 10 miles north of Odessa. Water level, in feet below measuring point, 1940: Jan. 1, 81.08; measurements discontinued.
- 68a. H. C. Barrow Estate. Seismograph test hole, 10.4 miles north of Odessa. Water levels, in feet below measuring point, 1940; Jan. 16, 72.39; July 31, 72.32; Nov. 23, 72.36.
- 73a. J. M. Gist. Seismograph test hole,  $NB_2^1SE_2^1$  sec. 33, blk. 42, T. I. S., 7 miles north of Odessa. Water levels, in feet below measuring point, 1940: Jan. 16, 71.65; July 31, 71.51; Nov. 23, 70.71.
- 149. Odessa Cemetery. One-half mile southeast of Odessa County Courthouse. Unused drilled well, diameter 6 inches, depth 87 feet. Measuring point, top of concrete curb around casing, 0.4 foot above land surface.

Water level, in feet below measuring point, 1937-38, 1940

Date	Water level	Date	Water level	Date	Water level
Feb. 16, 1937	45.80	Jan. 24, 1938	48.32	Aug. 1, 1940	49.27
June 28	47.18	Jan. 17, 1940	47.03	Nov. 23	48.03

161. J. M. Gist.  $SW_2^1SW_2^1$  sec. 10, blk. 42, T. 2 S., 2.5 miles north of Odessa. Water levels, in feet below measuring point, 1940; Jan. 16, 62.40; July 31, 62.67; Nov. 23,8/63.15.

a Windmill 150 feet southeast, pumping.

# El Paso County

## By A. N. Sayre

The water levels in 52 wells in the vicinity of El Paso, an increase of 12 wells over 1939, were measured about once a month during 1940. Sixteen of the wells are used chiefly or entirely for observational purposes; the rest of the wells are pumped either continuously or at intervals. The water-level measurements were mostly made when the pumps were idle; but in the wells that were operated continuously the measurements were made while the wells were being pumped.

The water levels declined in most of the wells for which measurements are available during the entire year, chiefly because there was a considerable increase in pumpage during the year. The average decline in water level in 32 wells was 2.5 feet. However, in and near the Montana well field the water levels in 7 wells rose an average of 1.55 feet. The pumping in this field was stopped in November, and hence there was an opportunity for the water levels to recover in spite of the fact that the pumpage from the field in 1940 was considerably greater than in 1939.

The average daily pumpage from all the wells in the El Paso area during 1940 was 18,355,000 gallons, as compared with 16,800,000 gallons during 1939. The smallest pumpage for any one month occurred in January when an average of 13,320,000 gallons a day was pumped; the largest was in June when the average daily pumpage was 24,200,000 gallons. The total pumpage in the El Paso area during 1940 was about 6,705,278,000 gallons, an increase of 556,250,000 gallons over the pumpage in 1939. The El Paso Water Department pumped 3,298,061,000 gallons from 11 wells--833,146,000 gallons from the Montana well field, 1,134,307,000 gallons from wells in the downtown area, and 1,330,608,000 gallons from wells in the Mesa well field. The pumpage from private wells, including the wells at Fort Bliss and the city of Juarez, amounted to 407,217,000 gallons. The principal increases in pumpage occurred from the wells at Fort Bliss and the Montana well field. The pumpage from the municipal wells in the downtown area increased only slightly and the pumpage from the wells in the Mesa well field decreased slightly.

## El Paso County -- Continued.

In the following tables the water levels are expressed in feet above mean sea level. Well numbers correspond to those in Water-Supply Paper 886, except for the wells added during 1940. The highest and lowest water levels on record for each well, except as noted in this report, are given in Water-Supply Papers 817, 840, and 886.

6. El Paso Electric Co. well 2, Santa Fe and 4th Streets.
Water level, in feet above mean sea level, 1940

Date	Water level		Water level		Water level		Water level
Feb. 21	3,698,91	May 25	3,697.27 3,696.75 3,695.75	Aug. 14	3.698.32	Nov. 18	3,697.80

7. El Paso Electric Co. well 1, Santa Fe and 4th Streets.

		re mean sea level, l	
Jan. 29 3,698.54	Apr. 15 3.696.71	July 16 3,696.77	Oct. 15 3.697.45
Feb. 21 3,698.49	May 25 3.697.61	Aug. 14 3,697.35	Nov. 18 3.697.25
Mar. 17 3,696.24	June 23 a3,694.70	Sept.11 3,697.46	Dec. 11 3,696.65

8. El Paso Electric Co. well 4, Santa Fe and 4th Streets.

Water	level, in feet	above mean sea leve	1, 1940
Jan. 29 3.694.24	Apr. 15 3,693.	03 July 16 3,692.	02 Oct. 15 3,692.88
			73 Nov. 18 3,692.97
Mar. 17 3,692.42	June 23 a3,691.	34 Sept.11 3,692.	37 Dec. 11 3,692.27

9. El Paso Electric Co. well 3, Santa Fe and 4th Streets.
Weter level in feet shows mean see level 1940

water	r level, in leet abo	ve mean sea level,	1940
Feb. 21 3,698.26	Apr. 15 3,695.81 May 25 3,694.49 June 23 a3,693.42	Aug. 14 3,696.70	Nov. 18 3,696.79

10. City of El Paso, 4th and Oregon Streets.

## Water level, in feet above mean sea level, 1940

					5 3,696.59
Mar. 17	3,695.96				3,696.49 1 3,695.99
Apr. 15	3,695.67		-	-	

- 12. City of Juarez well 1, Municipal market. Water level, in feet above mean sea level, 1940: Dec. 4,  $\underline{b}/3$ ,629.17.
- 13. City of Juarez well 2, Mariscal and Primera Streets. Water level, in feet above mean sea level, 1940: Dec. 4, 3,688.66.
- 18. City of Juarez well 3, near Hipodromo. Water level, in feet above mean sea level, 1940: Dec. 4,  $\underline{b}/3$ ,662.83.
  - 19. El Paso Milling Co., Kansas and 11th Streets.

# Water level, in feet above mean sea level, 1940

Jan. 29	3.694.19	Apr. 15	3.694.64	July 16	3,685.42	Oct. 15	3.693.85
Feb. 21	3,693.64	May 24	3,693.59	Aug, 14	3,693.21	Nov. 18	3,693.37
Mar. 18	3,693.14	June 24	3,685.32	Sept.11	3,693.41	Dec. 11	3,693.10

21. City of El Paso well 10, Campbell and 6th Streets.
Water level, in feet above mean sea level, 1940

Jan.	29	3,686.71	Apr.	15	3	686.29	July 2	23	c3,679.35	Oct.	15	3,684.83
Feb.	21	3,686.55	May	22	3	685.67	Aug.	12	3,682.68	Nov.	18	3,685.25
Mar.	14	3,686.04	June	24	<b>b</b> 3	,619.96	Sept.	11	3,683.70	Dec.	11	3,685.12

- a Lowest recorded water level. b Pump operating in well.
- c Well recently pumped.

#### El Paso County -- Continued.

22. City of El Paso well 6, 2nd and Cotton Streets.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21	3,686.97	May 24	3,686.54 3,688.65	30	3,684.99	Nov. 18	3,685.96
Mar. 14 Apr. 15	3,686.62 3,685.97	June 24 25	3,687.24 3,688.01	Aug. 12 Sept.11	3,685.94 3,684.86	Dec. 11	3,686.24

28. Acme Laundry, 905 E. Missouri Street.

Water level, in feet above mean sea level, 1940 July 19 3,656.28 Aug. 16 3,668.54 Sept.22 3,671.77 1 a3,676.63 3,672.98 Apr. 21 3,676.13 Oct. 20 Jan. 3,673.25 3,673.06 3,675.47 3,664.98 3,662.60 Nov. 10 Dec. 15 3,675.67 3,676.02 May 26 June 18 28 Feb. 25 Mar. 17 3,675.84 23

29a. Consumer's Ice and Fuel Co. well 2, Cotton and Dallas Streets. Diameter 12 inches, depth 572 feet. Measuring point, top of eduction pipe-coupling on top of steel plate that rests on top of casing, 2 feet above land surface and 3,708.84 feet above mean sea level. Water level, Nov. 11, 1939, 44.21 feet below measuring point.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
	, 1939 b3,664.63 , 1940 a3,671.35 3,670.54 3,668.80 3,665.81	May 24, 194 June 25 July 17 Aug. 14	3,664.66 3,667.64 3,658.97 3,665.15	Sept.11, 1940 Oct. 15 Nov. 18 Dec. 11	3,659.52 3,667.01 3,666.94 3,667.95

30a. City of El Paso well 14, San Antonio and Walnut Streets. Measuring point since Jan. 29, 1940, top of  $\frac{1}{2}$ -inch pipe 0.73 foot above floor of pump house and 3,703.99 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2 Mar. 1	9 a3,676.93 1 3,672.64 4 3,670.61 6 3,667.70	June 18	b3,664.01 c3,640.40 d3,660.18 3,666.49	Aug. 12	3,665.80	Nov. 18	3,666.53

31. City of El Paso well 7, Lee and Magoffin Streets.

# Water level, in feet above mean sea level, 1940

Jan.	29	3,692.51	Apr.	16	3,692.08	July 16 3	692.85	Oct.	18	3,692.84
						Aug. 14 a3				
						Sept.18 3				

32a. City of El Paso well 17, San Antonio and Tornillo Streets.

# Water level, in feet above mean sea level, 1940

Jan. 29 c3,644.11	Мау	22 c3,636.99	July 16 c3,635.00	Nov.	18 c3.638.67
Feb. 21 c3.640.97			Aug. 12 c3.638.04		
Mar. 14 c3 639.88			Sept.11 c3.635.70		
Apr. 16 e3,638.33		25 3,668.68	Oct. 15 c3.638.82		,

- a Highest recorded water level. c Pump operating in well.
  - Lowest recorded water level. d Well recently pumped.

## El Paso County -- Continued.

33. El Paso Foundry and Machine Co., Williams Street at International Boundary.

	Water	level, i	in feet abo	ve mean s	ea level,	1940	
Date	Water level	Date	Water level	Date	Water lev <b>el</b>	Date	Water level
Feb. 12	3,692.00	Apr. 16 May 24	3,692.22 3,692.38	July 17	3,692.00 3,692.36	Oct. 15 Nov. 19	3,692.15 3,691.77
	3,692.01						

36. Southern Pacific Ry., Piedras Street Shops.

Water	level, in feet abo	ve mean sea level,	1940
Jan. 30 3,686,23	Apr. 16 3,681.90	July 16 3,676.29	Oct. 15 3,676.40
Feb. 21 3.685.54	May 24 3,678.98	Aug. 14 3.678.12	Nov. 18 3.676.74
	June 18 3,676.18		

39. Midwest Dairies, Inc., Piedras and Oro Streets.

		un	•
Water	level, in feet abo	ve mean sea level,	1940
Feb. 25 3,671.69	June 26 b3,666.43 July 16 b3,659.93	July 16 b3,660.73 Aug. 14 3,665.89 Sept.17 3,664.52	Nov. 22 3,670.92

- $40\,\text{.}\,$  City of El Paso well, Piedras and Hamilton Streets. No measurements made in 1940.
  - City of El Paso well 5. Morenci and Grama Streets.

Water level, in feet above mean sea level, 1940 3,672.25 Apr. 16 3,663.24 July 29 May 24 3,662.93 Aug. 14 June 18 a3,658.54 Sept.17 3,664.75 3,668.41 3,659.35 3,661.98 30 Oct. 17 Nov. 22 3,670.72 Feb. 13 3,670.53 3,669.37 21 3,660.35 Dec. 12 Mar. 18 3,667.04

City of El Paso well 9, Luna and Pera Streets.

		water	Tever, in	l reet abo	ve mean s	ев телет,	1940	
Jan.	29	3,674.92	Apr. 15	3,666.10	June 19	c3,610.92	July 23	3,662.97
Feb.	21	3,671.72	June 17 b	3.654.96	25	3,662.64	Aug. 14	3,664.62
Mar.	14	3,669.21	19 c	3,610.99		-	_	,

44. Harry Mitchell Brewing Co., Travis and Frutas Streets.

	Water	level, in feet a	above mean sea	level,	1940	
Jan. 30	3,676.56	Apr. 21 3,668.4	13 July 19 3.	663.79	Oct. 16	3,670.00
Feb. 21	3,674.04	May 26 3,669.4	14 Aug. 14 3	667.43	Nov. 18	3,671.75
Mar. 17	3,671.38	June 27 c3,611.9	7 Sept.11 b3	660.34	Dec. 12	3,675.41

48a. City of El Paso well 18, Hadlock Addition. Diameter 24 inches, depth 727 feet. Measuring point after June 25, 1940, floor of pumphouse, 3,702.44 feet above mean sea level. Water level Apr. 8, 1940, 34.80 feet below measuring point.

	Water	· level, i	n feet abo	ve mean s	ea level,	1940	
Feb. 29	3,672.24	May 24	3,666.40	Aug. 14	3,666,63	Oct.	16 3,668.21
							18 3,672.06
16	3,666.30	July 16	3,664.55	23	3,666.41	Dec.	11 b3,673.28

a Lowest recorded water level. c Pump operating in well.

b Well recently pumped.

#### El Paso County -- Continued.

48b. City of El Paso test well 33. Diameter 4 inches. Measuring point, top of 4-inch casing, 3,697.37 feet above mean sea level. Water level Nov. 18, 1940, 23.87 feet below measuring point. Water level, in feet above mean sea level, 1940: Nov. 18, 3,673.50; Dec. 11,  $\underline{a}/3$ ,674.30.

49. City of El Paso well 4, Montana well field.

	Water	r level,	in feet abo	ve mean	sea level,	1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level

Jan. 30 b3,621.48 Apr. 16 b3,606.33 July 17 b3,602.94 Oct. 17 b3,611.66 Feb. 23 b3,619.13 May 22 b3,605.06 Aug. 15 b3,602.60 Nov. 19 3,670.12 Feb. 23 b3,619.13 Mar. 18 b3,609.78 June 24 b3,603.84 Sept.17 b3,603.34 Dec. 11 3,671.30

50. City of El Paso well 1. Montana well field.

Water level, in feet above mean sea level, 1940 Apr. 16 3,657.78 May 22 3,657.84 June 24 3,656.29 3,655.99 3,658.32 3,656.94 Jan. 3,667.98 July 17 Oct. 17 3,662.91 Aug. 15 3,665.47 3,661.63 Nov. 19 Dec. 11 3,669.77 Feb. 23 3,671.03 Sept.17 Mar. 18

51. City of El Paso well 2. Montana well field.

June 24

3,665.16

28

Water level, in feet above mean sea level, 1940 Mar. 18 3,659.81 July 17 3,654.15 Oct. 17 3,668.92 3,662.86 Jan. 3,668.47 3,656.95 3,670.88 Aug. 15 Sept.17 3,656.25 Nov. 19 30 Apr. 16 3,666.00 May 22 3,656.30 3,660.98 3,654.63 3,672.17 Feb. 23 Dec. 11

52. City of El Paso well 3, Montana well field. Measuring point since Feb. 23, 1940, top of  $\frac{1}{2}$ -inch pipe 0.36 foot above floor of pump house and 3,783.56 feet above mean sea level.

Water level. in feet above mean sea level. 1940

Feb.	12	3,669.83	May	22	b3,	631.79	Aug.	15	b3,733.41	Oct.	17	3,664.79
	23	3,667.65	June	24	b3	629.83	Sept.	17	b3,632.04	Nov.	19	3,670 <b>.3</b> 9
Mar.	18	b3,631.55	July	17	b3,	630,40		23	3,662.80	Dec.	11	3,671.62
Apr.	16	ъ3,629.83										

53. Loretto College, Clifton and Raynolds Streets.

Water level, in feet above mean sea level, 1940

Jan.	30	3,669.88	Apr.	16	3,660,85	July 17	3,658.40	Oct.	17	3,665.25
Feb.	23	3,667.75	May	22	3,660.66	Aug. 20	3,659.78	Nov.	19	3,670.05
Mar.	18	3,663.82	June	24	3,658.63	Sept.17	3,659.00	Dec.	16	3,671.37

55. Texas Cc., 0.6 mile northeast of Ascarate.

Water level, in feet above mean sea level, 1940

Jan.	30	3,671.72	Apr. 16	3,667.72	July 17	3,666,89	Oct. 15	3,668.57
				3,667.53				
Mar.	18	3,670.09	June 24	3,665.83	Sept.17	3,667.12	Dec. 11	3,672.49

64. City of El Paso and Geological Survey test well 1. Carlsbad Highway.

Water level, in feet above mean sea level, 1940

Feb.	5	3,681.25	Apr. 1	7 3.681.23	July 20	3,680,78	Oct. 18	c3,680,36
	26	3,681.16	May 2	7 3.681.03	Aug. 20	3,680.64	Nov. 20	3,680,65
Mar.				5 3.680.74				

Highest recorded water level.

b

Pump operating in well. Lowest recorded water level. c

#### El Paso County -- Continued.

67. Texas and New Orleans Ry., near south entrance to Fort Bliss.

Water level, in feet above mean sea level, 1940

Date	. Water level	Date	Water level	Date	Water level	Date	Water level
28	3,669.43	May 29	3,665.15 3,665.69 3,663.90	Sept.18	3,663.35 3,663.55	Nov. 23 Dec. 16	3,669.11 3,670.64

67b. No measurements made in 1940.

72. United States War Department, Fort Bliss well 2.

Water level, in feet above mean sea level, 1940 3,663.89 3,667.97 Feb. 12 Apr. 17 July 20 3,659.50 3,656.49 Nov. 23 May 29 26 3,667.87 3,662.29 3,658.83 3,657.09 Sept.18 3,656.34 Dec. 16 3.664.79 Mar. 20 June 26

75a. United States War Department, Fort Bliss well 6. Water level, in feet above mean sea level, 1940: Feb. 2, 3,670.16; Feb. 26, 3,669.98; Mar. 20, a/3,590.1.

75b. City of El Paso test well 10, 0.6 mile south of Wilson Road and 0.6 mile west of Airport Road.

Water level, in feet above mean sea level, July 20 3,667.81 Aug. 20 3,667.73 Sept.18 b3,667.12 Apr. 17 Oct. 3,672.92 3,668.97 18 3,670.60 3,672.86 3,668.68 3,670.04 26 May 28 Nov. 22 19 3,672.12 June 27 3,668.00 Dec. 13 3,670.34

75d. City of El Paso well 19, on Airport Road, 0.6 mile south of Wilson Road. Diameter 24 inches. Measuring point, floor of pumphouse, 3,908.41 feet above mean sea level. Water level Dec. 18, 1940, 233.14 feet below measuring point and 3,673.83 feet above mean sea level.

76. City of El Paso and Geological Survey test well 2, near southeast corner of Biggs Field.

Water level, in feet above mean sea level, 1940 3,680.54 3,681.25 Feb. 5 3,683.76 Apr. 17 3,680.46 July 19 3,679.35 Oct. 18 3,683.10 3,681.65 19 3,680.14 May 27 Aug. 20 3,679.48 Nov. 20 3,679.51 26 June 25 Sept.18 3,679.60 Dec. 13 3,681.52 19 Mar. 3,681.42

77. City of El Paso well 12, Mesa well field.

Water level, in feet above mean sea level, 1940 Water Water Water Date Date Date level level level 3,671.08 3,669.96 3,672.22 Oct. Feb. 5 Mar. 15 June 27 18 23 3,672.15 a 3,632.39 Dec. 13 3,665.04

77b. City of El Paso well 15, Wilson Road and Airport Road.

 Water level, in feet above mean sea level, 1940

 June 27
 a3,646.39
 Aug. 17
 a3,646.82
 Oct. 18
 a3,650.82

 July 19
 a3,646.16
 Sept.18
 a3,646.65
 Nov. 19
 3,675.85

78. City of El Paso well 11, Mesa well field.

Water level, in feet above mean sea level, 1940

			2000 000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·	20 20	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	3,668,18	Apr. 16	3,660.23 3,658.99	July 19	3,657.13 3,657.80	Oct. 18	3,666.13
Mar. 15	3,667.15	June 27	3.657.80	Sept.21			

- a Pump operating in well.
- b Lowest recorded water level.

#### El Paso County -- Continued.

78c. City of El Paso test well 4. One mile north of Mesa well field.
Water level, in feet above mean sea level, 1940

Date		Water level	Date	Water level	Date	Water level	Date	Water level
								3,679.49 3,679.53
Mar.	19	3,680.09	June 27	3,679.55	Sept.20	3,679.35	Dec. 13	3,679.45

79. City of El Paso well 8, Mesa well field. Water level, in feet above mean sea level, 1940: Mar. 15,  $\underline{b}/3$ ,598.64.

112. City of El Paso old Mesa well 32, Mesa well field.

		Water	level, i	n feet abo	ve mean s	ea level,	1940	
Feb.	5	3,665.83	Mar. 15	3,666.53	June 27	3,661.70	Aug. 17	3,661,58
	23	3,665.57	Apr. 16	3,664.14	July 19	3,660.72	Sept.18	3,661.71
Mar.	5	3,665.47	May 24	3,662.30		·	_	•

126. McElroy Packing Co., 3.3 miles north of Wilson Road near Southern Pacific Ry.

		Water	level, in f	eet above me	an sea level,	1940	
Feb.					20 3,690.23		
					.21 3,690.05		
Mar.	19	3,690.35	June 27 b3,	687.38 Oct.	17 a3,690.00		17 3,690.09

126a. City of El Paso test well 37, 2.5 miles east of well 126. Diameter 4 inches, depth 905 feet. Measuring point, top of 2-inch reducer, at land surface and 3,932.56 feet above mean sea level. Water level, Dec. 13, 1940, 242.27 feet below measuring point and 3,690.29 feet above mean sea level. Water level, in feet above mean sea level, 1940: Dec. 13, c/3,690.29.

128c. City of El Paso test well 23, 2.5 miles north of Mesa well field.

Water level, in feet above mean sea level, 1940

Feb.	5	3,688.97	Apr.	17	3,688.73	July 20	3,688.37	Oct. 19	a3,688.16
	23	3,688.75	May	28	3,688.57	Aug. 19	3,688.23	Nov. 22	3,688.50
Mar.	19	3,688.70	June	27	3,688.54	Sept.20	3,688.40	Dec. 16	3,688.26

130. G. T. Cook, Sunrise Acres, 2.9 miles north of Wilson Road.
Water level, in feet above mean sea level, 1940

		Marel	Tever, I	Treer goo	Ae weam ae	a 16761,	1940	
Feb.	5	3,689,96	Apr. 17	3,689.74	July 19	3,689.20	Oct. 18	3,689.22
	26	3,689.95	May 29	3,689.55	Aug. 19 a	3,689.11	Nov. 22	3,689.51
Mar.	19	3.689.74	June 27	3,689.44	Sept.20	3.689.29	Dec. 13	3,689.54

136. City of El Paso and Geological Survey test well 3, 6.9 miles north of Wilson Road.

				in feet abo				
Feb.	5	3,699.37	Apr. 17	3,699,53	July 19	3,699,18	Oct. 1	8 a3,699.00
	23	3,699.45	May 28	3,699.32	Aug. 15	3,699.25	Nov. 2	2 3,699.35
Mar.	19	3,699.28	June 27	3,699.25	Sept.20	3,699.31	Dec. 1	3 3,699.35

143a. City of El Paso test well 30, 6.5 miles west of Newman, N. Mex. Diameter 4 inches, depth 520 feet. Measuring point, top of casing, 1.2 feet above land surface and 4,042.39 feet above mean sea level. Water level May 27, 1940, 318.91 feet below measuring point.

	Water	level, in feet	above mean sea level,	1940
May 27	3,723.48	July 19 3,723.	49 Sept.20 3,723.42	Nov. 22 3,723.53
June 26	3,723.51	Aug. 15 c3,723.	53 Oct. 18 a3,723.35	Dec. 13 3,723.37

- a Lowest recorded water level.
- b Pump operating in well.
- c Highest recorded water level.

# El Paso County -- Continued.

139a. City of El Paso test well 29, 9 miles north of Mesa well field. Diameter 4 inches, depth 567 feet. Measuring point, top of 4-inch casing, 1.0 foot above land surface and 4,047.22 feet above mean sea level. Water level April 23, 1940, 336.60 feet below measuring point.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 23 May 27 June 26	a3,710.62 3,709.83 3,709.68	July 19 Aug. 15	3,709.61 3,709.79	Sept.20 Oct. 18	3,709.65 b3,709.43	Nov. 22 Dec. 13	3,709.79 3,709.72

a Highest recorded water level. b Lowest recorded water level.

416230 O - 41 - 9

## Floyd County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 5. M. C. Scheele. SW cor.  $SE_4^1$  sec. 127, blk. D-2, ll miles northwest of Lockney. Water levels, in feet below measuring point, 1940; Mar. 6, 53.14; Oct. 27, 54.68; Nov. 15, 54.48.
- 14. Herman R. King.  $SW_4^+SW_4^+SE_4^+$  sec. 5, blk. C-9, 10 miles north of Lockney. Water level, in feet below measuring point, 1940: Mar. 6, 62.79.
- 28. J. C. Anderson. SW cor.  $SW_{4}^{1}$  sec. 3, blk. D-1, 10 miles north of Lockney. Water level, in feet below measuring point, 1940: Mar. 6, 98.13.
- 32. Frank Whitfill. NW\(\frac{1}{2}\)NW\(\frac{1}\)NW\(\frac{1}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac{1}{2}\)NW\(\frac
- 44. R. J. McLaughlin. Center of NW1NE1 sec. 123, blk. D-2, 10 miles north of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 67.68; Nov. 15, 70.15.
- 57. T. L. Wilhite. NE2NW2 sec. 87, blk. D-2, 7.5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 62.79; Nov. 15, 63.87.
  - 71. Measurements discontinued.
  - 79. Measurements discontinued.
- 106. Texas Land and Development Company. SwiNEiNwi sec. 65, blk. D-2, 6 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 60.57; Nov. 16, 63.58.
- 108. Texas Land and Development Company. NW cor.  $SB_{\overline{4}}^1$  sec. 65, blk. D-2, 6.5 miles northwest of Lockney. Water level, in feet below measuring point, 1940: Mar. 6, 58.87.
- lll. Texas Land and Development Company.  $SW_2^1SW_2^1SW_3^1$  sec. 65, blk. D-2, 6.5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 54.88; Oct. 4, 61.63; Oct. 8, 61.01; Nov. 16, 57.88.
- 112. Texas Land and Development Company. NW1NW1NW2 sec. 12, blk. D-5, 7 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 54.11; Oct. 4, 61.07; Oct. 8, 60.98; Nov. 16, 57.18.
- 120. Francis Carthel. NW cor. NW sec. 1, blk. D-5, 4.5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 60.43; Nov. 16, 63.25.
- 124. Rosa Lee Carthel.  $NW_{2}^{1}SW_{2}^{1}SW_{2}^{1}$  sec. 50, blk. D-2, 3.5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 43.91; Oct. 27, 45.53; Nov. 16, 45.64.
- 140. Texas Land and Development Company. SW\u00e4NE\u00e4 sec. 2, blk. D-5, 3.5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 55.34; Nov. 16, 57.98.
- 143. Plainview-Lockney Farms.  $SE_2^1NW_2^1SW_2^1$  sec. 8, blk. D-5, 5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 62.98; Oct. 27, 67.47; Nov. 16, 67.05.
- 150. M. S. Gholson. NW cor.  $NW_4^1$  sec. 14, blk. D-5, 7 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 48.77; Nov. 16, 51.75.
- 153. Texas Land and Development Company. SW cor.  $NW_2^1$  sec. 15, blk. D-5, 6.5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 7, 54.90; Nov. 16, 58.10.
  - 156. Measurements discontinued.
- 157. Texas Land and Development Company. NW cor.  $NW_2$  sec. 10, blk. D-5, 6 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 56.76; Nov. 16, 60.67.

## Floyd County -- Continued.

161. Texas Land and Development Company. SW cor. NE2 sec. 10, blk. D-5, 5.5 miles west of Lockney.

	Water le	vel, in feet	below measur	ing point, 19	40
Date	Water level	Date	Water level	Date	Water level
Mar. 6 Oct. 9	61.50 66.37	Oct. 31 Nov. 5	65.74 65.80	Nov. 16	65.51

- 401. George Whitfield. NEINEISE sec. 39, blk. D-6, 6.5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 7, 57.62; Nov. 15, 58.30.
- 409. Texas Land and Development Company.  $NW_{4}^{1}NW_{4}^{1}$  sec. 24, blk. N, 5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 7, 57.14; Nov. 15, 58.04.
- 410. W. C. McGrede. SW cor.  $W_2$  sec. 44, blk. D-6, 5.5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 7, 51.49; Nov. 15, 55.05.
- 414. Mrs. Harriet B. Robbins. SW cor. SW sec. 46, blk. D-6, 4.5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 63.58; Nov. 15, 69.49.
- 416. Johnnie Spears. NW cor.  $NE_4^1SW_4^1$  sec. 46, blk. D-6, 4.5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 65.38; Nov. 15, 71.52.
- 421. W. W. Cooper. NW cor.  $NW_{\frac{1}{4}}$  sec. 48, blk. D-6, 3.5 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 61.80; Oct. 27, 66.93; Nov. 15, 66.40.
  - 422. Measurements discontinued.
- 428. Texas Land and Development Company. NW cor. F. Griggs survey, 3.5 miles southwest from Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 52.54; Oct. 5, 56.90; Nov. 15, 55.47.
- 435. Home Owners' Loan Corporation. Middle of L. C. Reed survey, in southwest part of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 59.88; Nov. 15, 63.91.
- 436. Four hundred feet southeast of railroad depot at Lockney. Water level, in feet below measuring point, 1940: Mar. 6, 48.46.
- 437. Lockney Oil Mill Company. In Lockney, 0.1 mile north of junction of U. S. Highway 70 with Lockney East Loop. Water levels, in feet below measuring point, 1940: Mar. 6, 52.79; Nov. 15, 54.22.
- 439. O. J. Schacht. NW cor. W. F. Smith survey, 3 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 54.97; Nov. 15, 57.29.
- 441. Federal Land Bank. NW cor. NW $\frac{1}{4}$  sec. 50, blk. D-3, 2 miles northeast of Lockney.

	Water let	el, in feet	below measur	ing point,	1940
Jan. 13	64.41	July 9	64.84	Nov. 15	65.23
Mar. 6	64.54	Oct. 27	65.18	Dec. 21	65.34

442. Solon Clements. NW1SW1NW1 sec. 51, blk. D-3, 2 miles east of Lockney.

	Water lev	rel, in feet	below measur	lng point,	1940
Jan. 13 Mar. 6		July 9 Nov. 15	39.28 39.51	Dec. 21	39.56

446. W. J. King. NE1SE1NW1 sec. 68, blk. G, 2.5 miles southeast of Lockney. Water levels, in feet below measuring point, 1940; Jan. 13, 44.17; Mar. 6, 44.19; Oct. 27, 45.71; Nov. 15, 45.15.

## Floyd County -- Continued.

- 459. Texas Land and Development Company. SW cor. M. Y. Price survey, 5.5 miles southwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 49.57; Nov. 15, 51.94.
  - 462. Measurements discontinued.
- 463. Texas Land and Development Company. NW cor. NW $\frac{1}{4}$  sec.14, blk. N, 6 miles west of Lockney. Water levels, in feet below measuring point, 1940: Mar. 7, 52.38; Nov. 15, 55.69.
- 467. C. J. Barnard.  $NW_{4}^{1}SW_{4}^{1}SW_{2}^{1}$  sec. 3, blk. N, 8 miles southwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 7, 42.19; Nov. 15, 45.68.
  - 468. Measurements discontinued.
- 472. Texas Land and Development Company. NW cor. J. K. Andrews survey, 5.5 miles northwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 49.47; Nov. 15, 51.82.
- 486. Mrs. M. E. Morris.  $SE_4^1NE_4^1SE_4^1$  sec. 53, blk. G, 5.5 miles southeast of Lockney.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 1	3 35.70 6 35.80	July 9 Oct. 27	35.93 36.02	Nov. 15	36.05

- 509. S. H. Boon. North end of C. H. Johnson survey, 8.5 miles south of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 42.60; July 9, 43.88; Nov. 15, 45.14.
- 510. L. D. Pope. North end of J. R. Powell survey, 8 miles southwest of Lockney. Water levels, in feet below measuring point, 1940: Mar. 6, 45.83; Nov. 15, 51.93.
- 519. J. L. Faulkner. NE cor.  $SW_2^1$  sec. 44, blk. G, 7.5 miles west of Floydada. Water levels, in feet below measuring point, 1940: Mar. 6, 52.64; Nov. 15, 53.85.
- 523. C. F. Harris. NELNW1 sec. 41, blk. G, 7.5 miles northwest of Floydada. Used drilled irrigation well, diameter 14 inches, depth 277 feet. Measuring point, top of 12-inch hole in flange on column pipe of submersible pump, 1 foot above land surface. Equipped with turbine pump. Water levels, in feet below measuring point; Dec. 8, 1939, 58.74; Mar. 6, 1940, 57.06; Oct. 20, 1940, 63.03; Nov. 15, 1940, 61.78.
  - 525. W. Fry. NW1NW1NW1 sec. 52, blk. G, 5.5 miles south of Lockney.
    Weter level in feet below measuring point 1940

	Maret Te	ver, in reet	Defor megani.	ing point,	1940
Jan. 13	41.60	July 9	42.15	Nov. 15	42.41
Mar. 6		Oct. 27	42.41		,
				·	

- 528. Mrs. Maud Hollums. SW cor. SW sec. 82, blk. G, 5 miles northwest of Floydada. Water levels, in feet below measuring point, 1940; Jan. 13, 51.83; Mar. 22, 51.89; Nov. 27, 52.09.
- 529. Panhandle and Santa Fe Railway. SW cor.  $SE_2^1NE_2^1$  sec. 63, blk. 1, 2 miles northwest of Floydada. Water levels, in feet below measuring point, 1940: Mar. 22, 110.88; Nov. 27, 111.04.
- 533. Martin Heirs. In Floydada, at West Kentucky and Fourth Streets. Water levels, in feet below measuring point, 1940: Mar. 22, 122.37; Nov. 27, 122.83.
  - 534. Measurements discontinued.
  - 535. Measurements discontinued.
- 562. H. W. Carver. NW $\frac{1}{4}$  of J. A. Huckabee survey. Water level, in feet below measuring point, 1940: Mar. 22, 137.79.

# Floyd County--Continued.

- 601. Measurements discontinued.
- 602. Measurements discontinued.
- 603. Gladys Fox.  $NW_2^1NE_2^1$  sec. 86, blk. 1, 5.5 miles east of Floydada. Water levels, in feet below measuring point, 1940: Jan. 13, 175.60; Nov. 27, 176.36.
  - 604. Measurements discontinued.

Mar. 18, 1933 Jan. 6, 1939

53.94

58.04

Sept.19

Dec. 21

- 605. W. B. Jones. NW cor.  $SW_{4}^{1}NE_{4}^{1}$  sec. 106, blk. 1, 10.5 miles east of Floydada. Water levels, in feet below measuring point, 1940: Jan. 13, 213.49; Nov. 27, 214.01.
- 607. Mrs. Kate Martin.  $NW_{2}^{1}NE_{2}^{1}$  sec. 4, blk. 1, 14.5 miles east of Floydada. Water levels, in feet below measuring point, 1940: Jan. 13, 240.47; Nov. 27, 240.39.

# Fort Bend County

Well numbers correspond to those given in Records of Wells, etc., State Board of Water Engineers, in cooperation with United States Department of the Interior, Geological Survey. (Mimeographed). 1939.

1. Pecan Acres, Inc. Eleven miles southwest of Katy. Used drilled domestic and stock well, formerly used for irrigation, diameter 18 inches, depth 205 feet, screens set at 59 to 103 feet and 145 to 202 feet. Measuring point, top of 8-inch wood water-pipe clamp set on casing, 1.65 feet above land surface. Equipped with windmill.

Water level, in feet below measuring point, 1931, 1939-40

Date	Water level	Date	Water level	Date	*	Water level
Sept.11, 1931 Mar. 15, 1939		Dec. 21, 1939 Mar. 12, 1940		Apr. 26, Oct. 1	1940	30.58 31.25

6. P. V. Cook. Six miles southwest of Katy. Used drilled irrigation well, diameter 16 inches, depth 596 feet. Measuring point, lower edge of end of discharge pipe, 6.0 feet above land surface. Equipped with turbine pump.

Wat	er level,	in fee	t below	measuring	point,	1939-40	
Mar. 15, 1939 Sept.19	69.12 69.00	Dec. :		67.01 66.80		1, 1940	70.84

7. C. C. Cardiff. Four miles south-southwest of Katy. Used drilled irrigation well, diameter 24 inches, depth 653 feet. Measuring point, top of 1-inch hole in pump base, 0.6 foot above land surface. Equipped with electric turbine pump.

electric turbine pump.

Water level, in feet below measuring point, 1931,1933,1939, and 1940

Mar. 3, 1931 53.81 Mar. 10, 1939 57.06 Mar. 12, 1940 59.04

65.34

60.64

Oct. 1

65.00

11. P. V. Cook. One and three-fourths miles south-southwest of Katy. Used drilled irrigation well, diameter 28 inches, depth about 170 feet. Measuring point, lower edge of end of discharge pipe, 6.0 feet above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1932-33, 1939-40 Aug. 11, 1932 Sept.29 Jan. 6, 1939 Mar. 10 Dec. 21, 1939 61.56 55.92 58.44 61.29 54.81 Mar. 12, 1940 57.10 Mar. 18, 1933 52.46 Sept.19 62.64 Oct. 62.86

12. Stockdick Estate. One-half mile west-southwest of Katy. Unused drilled irrigation well, diameter 18 inches. Measuring point, top of casing, 0.5 foot above land surface.

 Wat	er leve	l, in fe	eet below measuri	ng point,	1932-33	, 1939-40	
		25.59	Mar. 15, 1939 Sept.19 Dec. 21	27.01 28.05 28.92			29.94 29.90

## Fort Bend County -- Continued.

15. P. V. Cook. Three and one-fourth miles south-southwest of Katy. Used drilled irrigation well, diameter 24 inches, depth 172 feet. Measuring point, top of casing, 0.5 foot above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1931-33, 1939-40

Date	Water level	Date	Water level	Date	Water level
Mar. 24, 1931 May 15 Sept.29, 1932 Mar. 18, 1933	52.29 51.30 58.05 54.07	Jan. 6, 1939 Mar. 10 Sept.19	58.65 57.67 63.90	Dec. 21, 1939 Mar. 12, 1940 Apr. 26	61.02 59.90 60.24

16. C. C. Cardiff. Five miles southwest of Katy. Used drilled stock well, diameter 24 inches, depth 337 feet. Measuring point, top of tin cover over well, 0.1 foot above concrete foundation, 0.5 foot above land surface. Equipped with windmill. Formerly used for irrigation.

Wa	ter level	l, in fo	et below	measurin	g point,	1931,	, 19 <b>3</b> 9 and	1 1940
Aug. 25, Sept.19,	1931	51.82	Dec. 21	, 1939	61.37	Apr.	26, 1940	61.67
Sept.19,	1939	63.35	Mar. 12	, 1940	a62.57	Oct.	1	65.57

19. R. Robertson. Four and three-fourths miles south of Katy. Used drilled irrigation well, diameter 24 inches, depth 545 feet. Measuring point, lower edge of end of discharge pipe, 5.0 feet above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1931,1933, 1939-40

Mar.	24,	1931	39.47	Mar. 10, 1939	44.94	Mar. 12	1940 46.95
Mar.	18,	1933	46.75	Sept.19	57.94	Apr. 26	47.06
Jan.	_6,	1939	45.76	Dec. 21	49.08	0ct. 1	55.38

20. L. Pauli. Five and three-fourths miles south-southeast of Katy. Unused drilled irrigation well, diameter 24 inches, depth 250 feet. Measuring point, top of casing, 2.6 feet above land surface.

Water level, in feet below measuring point, 1931,1933, 1939-40 June 11, 1931 Mar. 18, 1933 Jan. 6, 1939 46.35 Mar. 10, 1939 38.85 Mar. 12, 1940 41.12 36.60 Sept.19 50.30 Apr. 26 41.20 Oct. 49.70 39.63 Dec. 21 42.07

21. L. Pauli. Six miles south of Katy. Used drilled irrigation well, diameter 36 inches. Measuring point, top of casing, at land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1931-33, 1939-40 Mer. 24, 1931 Aug. 19, 1932 Mer. 18, 1933 Jan. 6, 1939 Mar. 10, 1939 Sept.19 39.40 42.48 52.35 Mar. 12, Apr. 26 1940 44.43 49.45 44.58 40.66 Dec. 21 45.28 Oct. 1 51.65 6, 43.16

26. C. Pillot. Ten miles southeast of Katy. Unused drilled well, dismeter 26 inches, depth 657 feet. Measuring point, top of casing, at land surface.

Water level, in feet below measuring point, 1939-40

Jan. 6, 1939 27.20 Dec. 21, 1939 29.60 Apr. 26, 1940 32.24

Mar. 10 26.57 Mar. 12, 1940 28.91 Oct. 1 33.50

Sept.19 33.20

33. Earl McMillian. Three and one-half miles southwest of Katy. Used drilled irrigation well, diameter 15 inches, depth 346 feet. Measuring point, top of casing, 1.5 feet above land surface. Equipped with turbine pump.

 Water level, in feet below measuring point, 1939-40

 Mar. 15, 1939
 59.27
 Dec. 21, 1939
 61.75
 Apr. 26, 1940
 60.90

 Sept.19
 64.40
 Mar. 12, 1940
 61.00
 Oct. 4
 67.32

PAXST 131

# Fort Bend County -- Continued.

- 50. Owner's number 6. Fort Bend Utilities Company. At Sugarland. Used drilled industrial well, diameter 16 inches, depth 733 feet, screens at 481 to 564 and 664 to 729 feet. Measuring point, top of 1-inch hole in top of pump base, 4 feet above land surface. Equipped with turbine pump. Pumped almost constantly at 1,260 gallons a minute. Water levels, in feet below measuring point, 1940: May 26, a/42.50; July 21, b/46.96; Dec. 1, b/46.10.
- 53. Owner's number 4. Fort Bend Utilities Company. At Sugarland. Unused drilled well, diameter 8 inches, depth 1,049 feet. Measuring point, top of iron plate under board cover, 2 feet above land surface. Water levels, in feet below measuring point, 1940: May 26, c/38.85; July 21, d/43.77; Dec. 1, d/42.70.
- 54. Owner's number 3. Fort Bend Utilities Company. At Sugarland. Used drilled public supply well, diameter 24 inches, depth 1,606 feet, screen at 1,492 to 1,555 feet. Measuring point, top of base plate on pump, 1.0 foot above land surface. Equipped with turbine pump. Water levels, in feet below measuring point, 1940: May 26, e/29.72; July 21, e/30.69; Dec. 1, e/31.87.
- 75. Gulf Pipe Line Company. Ten miles east-southeast of Sugariant Used drilled industrial well, diameter 6 inches, depth 665 feet, screen set at 645 to 665 feet. Measuring point, top of 4-inch hole in side of tee on casing, 2.5 feet above land surface. Equipped with air lift. Gulf Pipe Line Company. Ten miles east-southeast of Sugarland.

		Water	Tevel,	in feet	pelow	measuring	point,	1938-40	
Date		<b>V</b>	Water level	Date		Water level	Date		Water level
Dec. Mar. May Aug.	6, 13, 22 1	1938 1939	47.79 47.39 47.88 48.84	Sept. Dec. Jan.	28,1939 2 16,1949	50.93	Feb. Aug. Nov.		51.10 52.76 54.80

76. Owner unknown. About one-half mile west of Blue Ridge prison farm. Unused drilled industrial well, diameter 6 inches, depth I92 feet. Measuring point, top of air line, 2.5 feet above land surface.

	Water	level,	in feet be	low measuring	point, 1	938-40	
Dec. 6	. 1938	33.10	Sept.28.	1939 34.42	June 2	8. 1940	35.74
Mar. 13	, 1939	33.27	Jan. 16,	1940 35.11	Aug.	5	36.08
May 22	•	33.53	Feb. 21	35.20	Sept.3	0	36.74
Aug. 1		33.72	May 3	35.47	Nov. 2	7	36.87

## Freestone County

- Well numbers correspond to those in Water-Supply Papers 845 and 886.
- 107. George Hoose. Two and seven-tenths miles northwest of Teague. Water levels, in feet below measuring point, 1940: Apr. 2, 60.48; July 10, 60.78; Nov. 22, 60.69.
- 109. H. J. Adamson. Two and six-tenths miles northwest of Teague. Water levels, in feet below measuring point, 1940: Apr. 2, 35.12; July 10, 35.38; Nov. 22, 35.83.
- 111. Magnolia Pipe Line Co. Three and seven-tenths miles northwest of Teague. Water levels, in feet below measuring point, 1940: Apr. 2, 42.75; July 10, 43.07; Nov. 22, 43.60.
- 112. Magnolia Pipe Line Co. Three and eight-tenths miles northwest of Teague. Water levels, in feet below measuring point, 1940: Apr. 2, 33.78; July 10, 34.09; Nov. 22, 34.23.
- 112-A. Magnolia Pipe Line Co. Three and eight-tenths miles northwest of Teague. Water levels, in feet below measuring point, 1940: Apr. 2, 82.97; July 10, 83.40; Nov. 22, 80.98.
- 113. Mrs. Hugh Day. Three and six-tenths miles northwest of Teague. Water levels, in feet below measuring point, 1940: Apr. 2, 24.13; July 10, 23.35; Nov. 22, 23.37.
  - Shut down 19 hours.
- 19 hours. c Nearby well 50 shut down 19 hours. 3 hours. d Nearby well 50 shut down 3 hours. Shut down about 3 hours after pumping 620 Shut down 3 hours. gallons a minute.

# Freestone County -- Continued.

- 200-A. John Dubose. In Streetman. Water levels, in feet below measuring point, 1940: Apr. 2, 19.64; July 11, 17.72; Nov. 24, 15.82.
- J. L. Bonner. Seven miles north of Fairfield. Water levels, in feet below measuring point, 1940: Apr. 2, 72.71; July 11, 72.86; Nov. 24, 72.79.
- J. L. Miller. Three and three-fourths miles north of Fairfield. Water levels, in feet below measuring point, 1940: Apr. 2, 30.85; July 11, 31.05; Nov. 24, 31.01.
- Lake & Ed Watson. Four and four-tenths miles west of Fairfield. Water levels, in feet below measuring point, 1940; Apr. 2, 14.20; July 10, 11.25; Nov. 22, 16.33.
- 649. A. H. White. One-fourth mile east of Dew. Well dry at 22 feet below measuring point on Apr. 2, July 10, and Nov. 22, 1940.
- 695-A. Clair Clark. Three and seven-tenths miles south of Dew. Water levels, in feet below measuring point, 1940: Apr. 2, 62.50; July, 10, 62.99; Nov. 22, 63.61.
- 697-A. W. F. Ezew. Four and eight-tenths miles south of Dew. Water levels, in feet below measuring point, 1940: Apr. 2, 32.78; July 10, 33.03; Nov. 22, 32.88.
- 856-A. W. H. Goolsby. At "Goolsby's Tourist Camp", 3.8 miles west of Dew. Water levels, in feet below measuring point, 1940: Apr. 2, 27.61; July 10, 28.03; Nov. 22, 27.90.
- 858-A. Dyle Black. One and one-half miles west of Dew. Water levels, in feet below measuring point, 1940: Apr. 2, 41.62; July 10, 42.17; Nov. 22, 41.11.

#### Gaines County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 2. Carrol Cobb. SW: sec. 20, blk. A-21, P. S. L., 7.4 miles south of Seminole. Water levels, in feet below measuring point, 1940: Sept. 30, 56.70; Nov. 22, 56.69.
- 6. Mrs. G. Jones. In Seminole, 0.25 mile south of Gaines County Courthouse. Water level, in feet below measuring point, 1940: Nov. 22,
- 6a.  $NW_2$  sec. 160, blk. G, 1.4 miles south of Seminole. Water lein feet below measuring point, 1940: Jan. 16, 41.96; July 31, 41.61; Water levels. Nov. 22, 42.33.
- 7. J. M. Parker. Thirty-five hundredths mile east of Gaines County Courthouse. Water level, in feet below measuring point, 1940: Jan. 16,
  - 8. Measurements discontinued.
- 9. S. H. Gilbreath. NW cor.  $NW_2$  sec. 152, blk. G, Western Texas Railroad Company, 10.85 miles southwest of Seagraves. Water levels, in feet below measuring point, 1940: Jan. 16, 67.45; July 31, 67.74.
- 12. Panhandle & Santa Fe Railroad Company. In Seagraves. Water levels, in feet below measuring point, 1940; Jan. 16, 74.36; July 31, 74.50.

## Galveston County

Well numbers correspond to those in Water-Supply Papers 777, 840, 845, and 886.

 Mrs. A. Voss. Five and three-quarters miles west of League City. Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 18	38.87	May 27	39.12	Oct. 2	41.99
Mar. 27	38.40	July 10	39.56	Dec. 14	40.81

# Galveston County--Continued.

11.	A. A.	Davis.	Genoa	Quadrangle	G-1,	in	town	οf	Friendswood.
-----	-------	--------	-------	------------	------	----	------	----	--------------

		Water	T	oelow measur Water	i	Wate
Date		level	Date	level	Date	leve
Jan.	18	57.18	May 27	58.30	Oct. 2	61.8
lar.		56.67	July 10	59.32	Dec. 14	59.5
	16.	Cecil Brown.	Genoa Quadran	ngle G-1, in	town of Frien	dswood.
		Water le	vel, in feet b	oelow measur:	ing point, 194	10
lar.	27	56 <b>.46</b>	July 10	59.13	Dec. 14	59.4
lay	27	58,16	Oct. 2	61.64		
	28.	•	uston & Hender	•	_	•
			vel, in feet b			
Jan.		51.78	May 27	52.11	Oct. 2	56.0
ar.	27	51.32	July 10	53.25	Dec. 14	54.0
	s dis	el, in feet be continued.	_	point, 1940	: Jan. 18, 36	.96; meas
	42.		eabrook Quadre			
ſan.	10	37.67	vel, in feet b	38.28		40.3
lar.		37.68	May 27 July 10	39.20	Oct. 2 Dec. 14	40.2
			r dary 20	300,000	2001 22	
		77 73 35	Five miles n	north of Alte	a Loma.	
	105.			nelow measur	ing point 194	ro.
en.		Water le	vel, in feet b			
	18 27	Water le 8.24 8.80	vel, in feet b May 27 July 10	9.24 9.13	0ct. 2 Dec. 14	10.5 9.1
lar.	18 27 112.	Water le 8.24 8.80 Galveston, Ho of Alta Loma.	wel, in feet by May 27 July 10 uston & Hender by Wel, in feet by	9.24 9.13 rson Railway pelow measur	Oct. 2 Dec. 14 . Six and one ing point, 194	10.5 9.1 -half mil
er.	18 27 112. heast	Water le 8.24 8.80  Galveston, Ho of Alta Loma. Water le 54.48	wel, in feet to May 27 July 10  uston & Hender vel, in feet to May 27	9.24 9.13 rson Railway pelow measur 58.44	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2	10.5 9.1 e-half mil 40 61.2
ar. north	18 27 112. heast	Water le 8.24 8.80 Galveston, Ho of Alta Loma. Water le	wel, in feet by May 27 July 10 uston & Hender by Wel, in feet by	9.24 9.13 rson Railway pelow measur	Oct. 2 Dec. 14 . Six and one ing point, 194	10.5 9.1 e-half mil 40 61.2
er.	18 27 112. heast 18 27	Water le 8.24 8.80 Galveston, Ho of Alta Loma. Water le 54.48 54.74	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10	9.24 9.13 rson Railway below measur 58.44 58.59	Oct. 2 Dec. 14 Six and one ing point, 194 Oct. 2 Dec. 14	10.5 9.1 e-half mil 40 61.2
er.	18 27 112. heast 18 27	Water le 8.24 8.80 Galveston, Ho of Alta Loma. Water le 54.48 54.74 E. Menotti.	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no	9.24 9.13 rson Railway below measur 58.44 58.59 ortheast of	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma.	10.5 9.1 e-half mil 40 61.2 56.9
ar.	18 27 112. heast 18 27	Water le 8.24 8.80 Galveston, Ho of Alta Loma. Water le 54.48 54.74 E. Menotti.	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by	9.24 9.13 rson Railway below measur 58.44 58.59 ortheast of A	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194	10.5 9.1 9-half mil 40 61.2 56.9
ar.	18 27 112. heast 18 27	Water le 8.24 8.80 Galveston, Ho of Alta Loma. Water le 54.48 54.74 E. Menotti. Water le	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no	9.24 9.13 rson Railway below measur 58.44 58.59 ortheast of	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma.	10.5 9.1 9-half mil 40 61.2 56.9
ar.	18 27 112. heast 18 27 113.	Water le 8.24 8.80  Galveston, Ho of Alta Loma. Water le 54.48 54.74  E. Menotti. Water le 35.45 35.86	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no vel, in feet by July 10 oct. 2	9.24 9.13 rson Railway below measur 58.44 58.59 ortheast of A below measur 35.67 35.88	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14	10.5 9.1 9-half mil 40 61.2 56.9
lar.  north  lan.  lar.	18 27 112. neast 18 27 113.	Water le 8.24 8.80  Galveston, Ho of Alta Loma. Water le 54.48 54.74  E. Menotti. Water le 35.45 35.86  J. W. Palmer	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by July 10 oct. 2	9.24 9.13 rson Railway pelow measur 58.44 58.59 ortheast of releasur 35.67 35.88 northeast of	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma.	10.5 9.1 9-half mil 10 61.2 56.9
[ar. [an. [ar.	18 27 112. heast 18 27 113. 18 27 115.	Water le 8.24 8.80  Galveston, Ho of Alta Loma. Water le 54.48 54.74  E. Menotti. Water le 35.45 35.86  J. W. Palmer Water le	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no vel, in feet by July 10 Oct. 2 . Six miles no vel, in feet by wel, in feet by wel, in feet by wel, in feet by wel, in feet by seven miles no vel, in feet by wel, in feet by wel, in feet by seven miles no vel, in feet by wel, in feet by seven miles no vel, in feet by seven miles no vel miles n	9.24 9.13 rson Railway pelow measur 58.44 58.59 ortheast of pelow measur 35.67 35.88 northeast of pelow measur	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma. ing point, 194	10.5 9.1 9-half mil 40 61.2 56.9 40 35.4
[ar. [an. [ar.	18 27 112. heast 18 27 113. 18 27 115.	Water le 8.24 8.80  Galveston, Ho of Alta Loma. Water le 54.48 54.74  E. Menotti. Water le 35.45 35.86  J. W. Palmer	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 seven miles no wel, in feet by July 10 oct. 2 six miles no wel, in feet by May 27 May 27	9.24 9.13 rson Railway pelow measur 58.44 58.59 ortheast of releasur 35.67 35.88 northeast of	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma.	10.5 9.1 9-half mil 40 61.2 56.9 40 35.4
[ar. [an. [ar.	18 27 112. heast 18 27 113. 18 27 115.	### Water 1e	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by July 10 oct. 2 . Six miles no wel, in feet by May 27 July 10	9.24 9.13 rson Railway pelow measur 58.44 58.59 ortheast of relow measur 35.67 35.88 northeast of pelow measur 40.29 39.19	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14	10.5 9.1 9-half mil 40 61.2 56.9 40 35.4
dar.  Jan.  Jan.  Jan.  Jan.  Jan.	18 27 112. heast 18 27 113. 18 27 115. 18 27	### Water 1e	wel, in feet to  May 27 July 10  uston & Hender  vel, in feet to  May 27 July 10  Seven miles no  vel, in feet to  July 10  oct. 2  Six miles no  vel, in feet to  May 27 July 10  . Dickinson Q	9.24 9.13 rson Railway pelow measur. 58.44 58.59 ortheast of relow measur. 35.67 35.88 cortheast of relow measur. 40.29 39.19 quadrangle,	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14  2.75 miles wes	10.5 9.1 9-half mil 40 61.2 56.9 40 35.4 40 37.7 36.1
Jan. Jan. Jan. Jan. Jan. Jan. Jan. Jan.	18 27 112. heest 18 27 113. 18 27 115. 18 27 142.	### Water 1e	wel, in feet by May 27 July 10 uston & Hender by May 27 July 10 uston by May 27 July 10 uston by May 10 uston by May 10 uston by May 10 uston by May 27 July 10 uston by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 10 uston Quel, in feet by May 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 10 uston Quel, in	9.24 9.13 rson Railway pelow measur 58.44 58.59 prtheast of pelow measur 35.67 35.88 northeast of pelow measur 40.29 39.19 quadrangle,	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14  2.75 miles westing point, 194	10.5 9.1 3-half mil 40 61.2 56.9 40 35.4 40 37.7 36.1
ian. ian. ian. ian. ian. iar. iar.	18 27 112. neast 18 27 113. 18 27 115. 18 27 142.	### Water 1e	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by July 10 oct. 2  Six miles no wel, in feet by May 27 July 10  Dickinson Quel, in feet by May 27 wel, in feet by May 27	9.24 9.13 rson Railway below measur 58.44 58.59 ortheast of relow measur 35.67 35.88 northeast of pelow measur 40.29 39.19 quadrangle,	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma. ing point, 194 Cct. 2 Dec. 14  2.75 miles westing point, 194 Oct. 2	10.5 9.1 9-half mil 40 61.2 56.9 40 35.4 40 37.7 36.1 4t of Leag
ian. ian. ian. ian. ian. iar. iar.	18 27 112. neast 18 27 113. 18 27 115. 18 27 142.	### Water 1e	wel, in feet by May 27 July 10 uston & Hender by May 27 July 10 uston by May 27 July 10 uston by May 10 uston by May 10 uston by May 10 uston by May 27 July 10 uston by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 10 uston Quel, in feet by May 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 27 July 10 uston Quel, in feet by May 10 uston Quel, in	9.24 9.13 rson Railway pelow measur 58.44 58.59 prtheast of pelow measur 35.67 35.88 northeast of pelow measur 40.29 39.19 quadrangle,	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Dec. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14  2.75 miles westing point, 194	10.5 9.1 9-half mil 40 61.2 56.9 40 35.4 40 37.7 36.1 4t of Leag
dar.  fan. fan. fan. fan. fan. fan. fan. fa	18 27 112. heast 18 27 113. 18 27 115. 18 27 142.	### Water 1e	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by July 10 oct. 2 . Six miles no wel, in feet by May 27 July 10 . Dickinson Quel, in feet by May 27 July 10 . Three and on Three and on	9.24 9.13 rson Railway pelow measur 58.44 58.59 prtheast of relow measur 35.67 35.88 northeast of relow measur 40.29 39.19 quadrangle, 20.48.31 ne-half mile	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Oct. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14  2.75 miles westing point, 194 Oct. 2 Dec. 14  Sweat of Texas	10.5 9.1 3-half mil 40 61.2 56.9 40 35.4 40 51.2 49.7 48 City.
Mar.  Jan.  Jan.	18 27 112. heast 18 27 113. 18 27 115. 18 27 142	### Water 1e	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by July 10 oct. 2 . Six miles no wel, in feet by May 27 July 10 . Dickinson Quel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on wel, in feet by May 27 July 10 . Three and on well well and w	9.24 9.13 rson Railway below measur 58.44 58.59 brtheast of below measur 40.29 39.19 cuadrangle, 2010 measur 47.20 48.31 ne-half mile	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Oct. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14  2.75 miles westing point, 194 Oct. 2 Dec. 14  s west of Texsing point, 194 s west of Texsing point, 194	10.5 9.1 3-half mil 40 61.2 56.9 40 35.4 40 51.2 49.7
Jan. Mar. Jan. Mar. Jan. May Jan. Mar. Jan. Mar.	18 27 112. neast 18 27 113. 18 27 115. 18 27 142. 18 27 142. 18 27 16 18 27 16 18 27 18 27 18 27 18 27 18 27 18 27 18 27 18 27 206.	### Water 1e	wel, in feet by May 27 July 10 uston & Hender wel, in feet by May 27 July 10 Seven miles no wel, in feet by July 10 oct. 2 . Six miles no wel, in feet by May 27 July 10 . Dickinson Quel, in feet by May 27 July 10 . Three and on Three and on	9.24 9.13 rson Railway pelow measur 58.44 58.59 prtheast of relow measur 35.67 35.88 northeast of relow measur 40.29 39.19 quadrangle, 20.48.31 ne-half mile	Oct. 2 Dec. 14  Six and one ing point, 194 Oct. 2 Dec. 14  Alta Loma. ing point, 194 Oct. 14  Alta Loma. ing point, 194 Oct. 2 Dec. 14  2.75 miles westing point, 194 Oct. 2 Dec. 14  Sweat of Texas	10.5 9.1 3-half mil 40 61.2 56.9 40 35.4 40 51.2 49.7 48 City.

## Galveston County -- Continued.

244. Stone Oil Company. Texas City Quadrangle, in town of Texas City.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level a68.23 Jan. 18 a72.61 May 27 62.41 Oct. 2 Mar. 27 63.70 67.30 July 10 61.94 Dec. 14

272. City of Galveston. At Alta Loma. Water levels, in feet below measuring point, 1940; Jan. 18, 75.07; Mar. 28, 77.15; May 28, 72.45; July 10, obstruction at 62 feet.

295. A. T. & S. F. R. R. Hitchcock Quadrangle, in Hitchcock.

	Water le	vel, in feet	below measur	ing point,	1940
Jan. 18 Mar. 28		May 28 July 10		Oct. 2 Dec. 14	49.18 46.92

302. Joe Torraso. Four miles east-southeast of Alta Loma. No measurements made in 1940.

381. Stewart Production Company. Virginia Point Quadrangle, 3 miles southeast of Hitchcock.

	Water lev	el, in feet belov	measur	ing point, 1940	
Jan. 18 Mar. 28		May 28 July 10		Oct. 2 Dec. 14	38.62 37.05

619. Phenix Dairy. Dickinson Quadrangle, 4 miles northwest of Alta Loma.

	Water le	vel, in feet	below measur	ing point, 1	940
Jan. 18	44.28	May 28	45,69	Oct. 2	49.13
Mar. 28	44.65	July 10	47.33	Dec. 14	48.27

# Gray County

Well number corresponds to that in Water-Supply Paper 886.

1. Along U. S. Highway 60, 6.25 miles southwest of Roberts-Gray County line. Water levels, in feet below measuring point, 1940; Apr. 9, 339.56; Aug. 6, 339.85; Dec. 4, 339.33.

## Gregg County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

159. T. B. Harris. Four and six-tenths miles northwest of Longview city limits. Water levels, in feet below measuring point, 1940: Apr. 4, 182.66; July 12, 180.39; Nov. 26, 182.79.

188. M. L. Jackson. Four-tenths mile west of Longview city limits. Water levels, in feet below measuring point, 1940: Apr. 4, 16.42; July 12, 15.42; Nov. 26, 14.23.

189. M. L. Jackson. One-half mile west of Longview city limits. Water levels, in feet below measuring point, 1940; Apr. 4, 17.02; July 12, 17.36; Nov. 26, 17.88.

192. 0il Well Supply Company. Two and one-half miles northwest of Longview city limits. Water levels, in feet below measuring point, 1940: Apr. 4, 17.02; July 12, 17.36; Nov. 26, 17.88.

a Well 200 feet northwest recently pumped.

#### Gregg County -- Continued.

259. Owner's number 2. City of Gladewater. In Gladewater, one block southeast of pump station. Used drilled public supply well, diameter 12½ inches, depth 725 feet, plugged at 388 feet. Measuring point, top of pump base, about 1.0 foot above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1938-40

Date	Water level	Date	Water level	Date	Water level
June 10, 1938 Feb. 7, 1939	150.68 16B.23	Dec. 10, 1939 Apr. 4, 1940	169,59 <b>143,</b> 50	Nov. 26, 1940	154.71

262. Morgan Ice Company. In Gladewater, west of ice houss. Seldom used drilled industrial well, diameter 6 inches, depth 780 feet. Measuring point, top of casing, 1.5 feet above land surface. Equipped with air lift.

 Water level, in feet below measuring point, 1931, 1939-40

 Nov. 24, 1931
 70.07
 May
 5, 1939
 119.01
 Apr. 4, 1940
 110.93

 Feb. 7, 1939
 114.94
 Dec. 10
 126.80
 July 12
 127.39

263. Morgan Ice Company. In Gladewater. Seldom used drilled industrial well, diameter 6 inches, depth 618 feet. Measuring point, top of casing, 1.5 feet above land surface. Equipped with air lift.

Water level, in feet below measuring point, 1939-40

Feb. 7, 1939 123.64 Dec. 10, 1939 128.52 July 12, 1940 131.38

May 5 130.00 Apr. 4, 1940 112.17 Nov. 26 125.42

264. Owner's number 5. City of Gladewater. In west edge of Gladewater. Unused drilled public supply well, diameter 10 inches, depth 213 feet. Measuring point, top of 1-inch coupling set in concrete, 2 feet above land surface. Water levels and locations corrected from those given in Water-Supply Papers 845 and 886. Water levels, in feet below measuring point, 1940: July 12, 71.99; Nov. 26,  $\underline{a}/83.63$ .

271. Mrs. Allen. Seven and one-half miles northwest of Longview city limits. Water levels, in feet below measuring point, 1940: Apr. 4, 47.96; July 12, 48.35; Nov. 26, 48.13.

276. Fred Adrian. Five and eight-tenths miles northwest of Longview city limits. Water levels, in feet below measuring point, 1940: Apr. 4, 23.52; July 12, 23.59; Nov. 26, 14.54.

## Guadalupe County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

316. Joe Gleitz. Four hundred feet north of U. S. Highway 81, 0.1 mile east of Guadalupe-Bexar County line.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level 118.75 Jan. 30 114.17 116.06 116.57 Apr. 30 July 25 Oct. 29 Feb. 20 Aug. 28 118.54 114.46 23 116.30 Dec. 115.72 May Mar. 22 115.56 June 21 115.12 Sept.24 118.49

317. Joe Gleitz. Twenty feet south of well 316.

	Wa	ter level,	in feet	below measu:	ring poin	nt, 1940	
Jan. 30 Feb. 20 Mar. 22	76.26	Apr. 30 May 23 June 21		July 25 Aug. 28 Sept.24		Oct. 29 Dec. 4	76.66 75.92

a Owner's number 5, 50 feet north, pumping.

## Hale County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 11. S. C. Hutchinson.  $NE_{1}^{1}SE_{2}^{1}$  sec. 5, blk. Sl, 16 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 39.33; July 9, 39.52; Nov. 16, 40.03.
- 16. Cottle Co. NW1NB1 sec. 8, blk. Sl, 15 miles northwest from Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 49.71; July 9, 49.91; Nov. 16, 50.39.
  - 30. Measurements discontinued.
  - 36. Measurements discontinued.
- 37. G. D. Lewellen.  $NW_4^1SW_4^1$  sec. 19, blk. 06, 12 miles northwest of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 27, 67.30; Nov. 16, 67.87.
- 102. Ed Duvall.  $SW_2^1NW_4^1$  sec. 6, blk. C4, 16 miles north of Hale Center. Water levels, in feet below measuring point, 1940; Mar. 5, 49.69; July 9, 50.24; Nov. 16, 50.89.
- 103. Carl Meyer. NE1SE1 sec. 8, blk. C4, 16 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 47.89; Nov. 16, 48.68.
- 105. Texas Land and Development Co. NW1SW1 sec. 27, blk. S1, 14 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 51.14; Nov. 16, 55.97.
- 112. C. Zelner.  $NW_2^1NW_2^1$  sec. 12, blk. JK, 12.5 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 55.10; July 9, 55.40; Nov. 16, 60.95.
- 115. H. L. Gunter.  $NW_2^1NE_2^1$  sec. 16, blk. JK, 13.5 miles north of Hale Center. Water levels, in feet below measuring point, 1940; Feb. 29, 56.42; July 9, 57.92; Oct. 29, 58.92; Nov. 16, 58.65.
  - 120. Measurements discontinued.
- 123. L. C. Wayland.  $NW_2^1NE_2^1$  sec. 24, blk. JK, 11 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 63.09; Nov. 16, 66.30.
  - 124. Measurements discontinued.
- 125. E. E. Clark. SELSW sec. 1, blk. JK4, 10 miles northwest of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 27, 81.99; Nov. 13, 84.54.
  - 201. Measurements discontinued.
- 202. Texas Land and Development Company.  $NW_2^1NE_2^1$  sec. 20, blk. C3, 17 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 66.72; Nov. 7, 68.63.
  - 203. Measurements discontinued.
- 206. Texas Land and Development Company. Just east of center of Richard William survey, 18 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 69.66; Nov. 15, 72.00.
- 208. Texas Land and Development Company. SW1 J. P. Lattimore survey, 17.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 66.28; Nov. 15, 68.90.
  - 209. Measurements discontinued.
- 210. Texas Land and Development Company.  $NW_2^1$  D. R. McVicker survey, 18.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 65.76; Sept. 18, 67.65; Sept. 28, 67.60; Nov. 15, 67.49.
- 212. Texas Land and Development Company. West center D. R. McVicker strip, west of sec. 55, blk. M14, 18 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 63.89; Nov. 15, 69.37.

#### Hale County -- Continued.

- 213. Measurements discontinued.
- 220. Texas Land and Development Company.  $NW_2^2NB_2^2$  sec. 3, blk. JK3, 15.5 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 55.60; Nov. 7, 58.32.
  - 221. Measurements discontinued.
- 223. Texas Land and Development Company.  $NW_2^1SB_2^1$  sec. 18, blk. C3, 14.5 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 53.75; Nov. 7, 57.14.
- 251. M. Hutchinson.  $NW_{2}^{1}NW_{2}^{1}$  sec. 8, blk. JK3, 13.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 48.34; Nov. 7, dry at 49 feet.
- 232. M. Hutchinson.  $NW_{2}^{1}NW_{2}^{1}$  sec. 1, blk. JK3, 13.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 52.55; Nov. 7, 59.89.
- 238. Dr. McKinley Howell.  $SE_2^{1}SW_2^{1}$  sec. 8, blk. JK3, 13.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 53.53; Nov. 7, 55.93.
- 246.  $NB_2^1NE_2^1$  sec. 34, blk. JK2, 12 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 49.65; Oct. 27, 54.20; Nov. 7, 54.62.
  - 248. Measurements discontinued.
  - 249. Measurements discontinued.
  - 252. Measurements discontinued.
- 255. G. H. Slaton. SE NW sec. 15, blk. JK2, 10 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 20.24; Nov. 13, 21.62.
- 256. R. M. Malone.  $SE_{2}^{1}SW_{2}^{1}$  sec. 10, blk. JK2, 9 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 41.32; July 9, 41.73; Nov. 13, 42.39.
- 259. C. S. Ebeling.  $NW_{4}^{1}SE_{4}^{1}$  sec. 3, blk. JK2, 9 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 19.89; Nov. 13, 21.71.
  - 261. No measurements made in 1940.
- 263. Federal Land Bank.  $\text{NW}_4^1\text{SW}_4^1$  sec. 6, blk. JK5, 15 miles northeast of Hale Center.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

/ITOM Lecoldet							· ,				
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug:	Sept.	Oct.	Nov.	Dec.
45.06	45.08	45.05	45.03			45.47	45.65	45.84		46.34	46.43
45.06	45.08	45.05	45.03			45.47	45.66	45.85		46.34	46.43
45.06	45.08	45.05	45.03			45.47	45.67	45.87		46.35	46'.44
45.06	45.08	45.05	45.03			45.47	45.68	45.87		46.35	46.44
45.06	45.08	45.05	45.06			45.48	45.68	45.88			46.44
45.07	45.08	45.05	45.06	45.18		45.50	45.68	45.88	46.23	46.37	46.44
45.07	45.08	45.05	45.06	45.19		45.51	45.69	45.89	46.23	46.37	46.44
45.07	45.08	45.05	45.06	45.20		45.51	45.70	45.90	46.24	46.37	46.45
45.07	45.08	45.05	45.06	45.20		45.51	45.70	45.90	46.26	46.38	46.46
45.07	45.07	45.04	45.06	45.22		45.54	45.73	45.93	46.27	46.39	46.47
45.07	45.07	45.04	45.06	45.22		45.54		45.94	46.28	46.39	46.47
45.07	45.07	45.04	45.06	45.23		45.54		45.97	46.28		46.47
45.07	45.07	45.04	45.06	45.23		,		45.97	46.28		46.47
45.07	45.07	45.04	45.06	45.24		,	45.77		46.28		
45.08	45.06	45.04	45.08			45.58	45.78	45,99	46.32		
	45.06 45.06 45.06 45.06 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07 45.07	45.06 45.08 45.06 45.08 45.06 45.08 45.06 45.08 45.07 45.08 45.07 45.08 45.07 45.08 45.07 45.08 45.07 45.08 45.07 45.07 45.07 45.07 45.08 45.06 45.08 45.06 45.08 45.06	45.06 45.08 45.05 45.06 45.08 45.05 45.06 45.08 45.05 45.06 45.08 45.05 45.06 45.08 45.05 45.07 45.08 45.05 45.07 45.08 45.05 45.07 45.08 45.05 45.07 45.08 45.05 45.07 45.08 45.05 45.07 45.08 45.04 45.07 45.07 45.04 45.08 45.06 45.04 45.08 45.06 45.04 45.08 45.06 45.04 45.08 45.06 45.04	45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.07 45.08 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.06 45.07 45.04 45.06 45.07 45.07 45.04 45.06 45.07 45.08 45.08 45.04 45.06 45.04 45.06 45.08 45.08 45.04 45.08 45.08 45.08 45.04 45.08 45.08 45.08 45.04 45.08	45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.06 45.06 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.18 45.07 45.08 45.05 45.06 45.19 45.07 45.08 45.05 45.06 45.19 45.07 45.08 45.05 45.06 45.20 45.07 45.08 45.05 45.06 45.20 45.07 45.08 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.08 45.06 45.04 45.06 45.25 45.08 45.06 45.04 45.06 45.25	45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.03 45.06 45.08 45.05 45.06 45.06 45.08 45.05 45.06 45.07 45.08 45.05 45.06 45.18 45.07 45.08 45.05 45.06 45.18 45.07 45.08 45.05 45.06 45.19 45.07 45.08 45.05 45.06 45.20 45.07 45.08 45.05 45.06 45.20 45.07 45.08 45.05 45.06 45.20 45.07 45.08 45.05 45.06 45.20 45.07 45.08 45.05 45.06 45.21 45.07 45.07 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.22 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.23 45.07 45.07 45.04 45.06 45.24 45.07 45.07 45.04 45.06 45.25 45.08 45.06 45.04 45.06 45.25 45.08 45.06 45.04 45.06 45.25 45.08 45.06 45.04 45.07 45.25 45.08 45.06 45.04 45.07 45.25 45.08 45.06 45.04 45.07 45.25 45.08 45.06 45.04 45.07 45.25 45.08 45.06 45.04 45.07 45.25 45.08 45.06 45.04 45.07 45.25 45.08 45.06 45.04 45.08 45.25 45.08 45.06 45.04 45.08 45.25 45.08 45.06 45.04 45.08 45.08 45.08 45.06 45.08 45.08 45.06 45.04 45.08 45	45.06 45.08 45.05 45.03 45.47 45.06 45.08 45.05 45.03 45.47 45.06 45.08 45.05 45.03 45.47 45.06 45.08 45.05 45.03 45.47 45.06 45.08 45.05 45.03 45.47 45.06 45.08 45.05 45.06 45.48 45.07 45.08 45.05 45.06 45.18 45.49 45.07 45.08 45.05 45.06 45.18 45.50 45.07 45.08 45.05 45.06 45.19 45.51 45.07 45.08 45.05 45.06 45.20 45.51 45.07 45.08 45.05 45.06 45.20 45.51 45.07 45.08 45.04 45.06 45.21 45.52 45.07 45.07 45.04 45.06 45.22 45.52 45.07 45.07 45.04 45.06 45.22 45.54 45.07 45.07 45.04 45.06 45.22 45.54 45.07 45.07 45.04 45.06 45.22 45.54 45.07 45.07 45.04 45.06 45.23 45.54 45.07 45.07 45.04 45.06 45.23 45.54 45.07 45.07 45.04 45.06 45.23 45.54 45.07 45.07 45.04 45.06 45.23 45.54 45.07 45.07 45.04 45.06 45.2345.54 45.08 45.06 45.04 45.06 45.25 45.08 45.06 45.04 45.06 45.25 45.08 45.06 45.04 45.06 45.25 45.08 45.06 45.04 45.06 45.25	45.06 45.08 45.05 45.03 45.47 45.65 45.06 45.08 45.05 45.03 45.47 45.66 45.06 45.08 45.05 45.03 45.47 45.66 45.06 45.08 45.05 45.03 45.47 45.68 45.06 45.08 45.05 45.03 45.47 45.68 45.06 45.08 45.05 45.06 45.48 45.68 45.07 45.08 45.05 45.06 45.18 45.49 45.68 45.07 45.08 45.05 45.06 45.18 45.50 45.68 45.07 45.08 45.05 45.06 45.18 45.50 45.68 45.07 45.08 45.05 45.06 45.19 45.51 45.69 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.07 45.08 45.05 45.06 45.21 45.52 45.71 45.07 45.07 45.04 45.06 45.22 45.52 45.73 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.07 45.07 45.04 45.06 45.23 45.54 45.73 45.07 45.07 45.04 45.06 45.23 45.54 45.73 45.07 45.07 45.04 45.06 45.23 45.54 45.77 45.07 45.07 45.04 45.06 45.23 45.54 45.77 45.07 45.07 45.04 45.06 45.23 45.54 45.77 45.07 45.07 45.04 45.06 45.25 45.77 45.07 45.07 45.04 45.06 45.25 45.77 45.08 45.06 45.04 45.07 45.25 45.77 45.08	45.06 45.08 45.05 45.03 45.47 45.65 45.84 45.06 45.08 45.05 45.03 45.47 45.66 45.85 45.06 45.08 45.05 45.03 45.47 45.66 45.85 45.06 45.08 45.05 45.03 45.47 45.68 45.87 45.06 45.08 45.05 45.06 45.47 45.68 45.87 45.06 45.08 45.05 45.06 45.49 45.68 45.88 45.07 45.08 45.05 45.06 45.18 45.49 45.68 45.88 45.07 45.08 45.05 45.06 45.18 45.50 45.68 45.88 45.07 45.08 45.05 45.06 45.19 45.51 45.69 45.89 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.90 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.90 45.07 45.08 45.04 45.06 45.21 45.52 45.71 45.90 45.07 45.08 45.04 45.06 45.21 45.52 45.71 45.90 45.07 45.07 45.04 45.06 45.22 45.52 45.71 45.92 45.07 45.07 45.04 45.06 45.22 45.52 45.73 45.92 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.94 45.07 45.07 45.04 45.06 45.22 45.54 45.74 45.94 45.07 45.07 45.04 45.06 45.22 45.54 45.75 45.94 45.07 45.07 45.04 45.06 45.23 45.54 45.75 45.97 45.07 45.07 45.04 45.06 45.23 45.54 45.77 45.98 45.07 45.07 45.04 45.06 45.23 45.54 45.77 45.98 45.07 45.07 45.04 45.06 45.23 45.54 45.77 45.98 45.07 45.07 45.04 45.06 45.25 45.77 45.98 45.08 45.06 45.04 45.06 45.25	45.06 45.08 45.05 45.03 45.47 45.65 45.84 45.06 45.08 45.05 45.03 45.47 45.66 45.85 45.06 45.08 45.05 45.03 45.47 45.68 45.87 45.06 45.08 45.05 45.03 45.47 45.68 45.87 45.06 45.08 45.05 45.06 45.48 45.68 45.88 45.06 45.08 45.05 45.06 45.48 45.68 45.88 45.07 45.08 45.05 45.06 45.18 45.50 45.68 45.88 45.07 45.08 45.05 45.06 45.18 45.51 45.69 45.89 46.23 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.90 46.24 45.07 45.08 45.05 45.06 45.20 45.51 45.70 45.90 46.26 45.07 45.08 45.04 45.06 45.21 45.52 45.71 45.90 46.26 45.07 45.07 45.08 45.06 45.22 45.52 45.73 45.92 46.27 45.07 45.07 45.04 45.06 45.22 45.52 45.73 45.92 46.27 45.07 45.07 45.04 45.06 45.22 45.52 45.73 45.92 46.27 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.94 46.28 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.94 46.28 45.07 45.07 45.04 45.06 45.22 45.54 45.73 45.94 46.28 45.07 45.07 45.04 45.06 45.22 45.54 45.97 46.28 45.07 45.07 45.04 45.06 45.23 45.54 45.97 46.28 45.07 45.07 45.04 45.06 45.23 45.57 45.98 46.20 45.07 45.07 45.04 45.06 45.25 45.77 45.98 46.20 45.07 45.07 45.04 45.06 45.25 45.77 45.98 46.20 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.06 45.04 45.06 45.25 45.77 45.98 46.30 45.08 45.08 45.06 45.04 45.08 45.05 45.77 45.99 46.30 45.08 45.08 45.06 45.04 45.08 45.08 45.77 45.99 46.30 45.08 45.08 45.06 45.04 45.08 45.77 45.99 46.30 45.08 45.08 45.06 45.04 45.08 45.77 45.99 46.30 45.08 45.08 45.06 45.04 45.08 45.77 45.99 46.30 45.08 45.08 45.06 45.04 45.08 45.77 45.99 46.30 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45.08 45	Jan.         Feb.         Mar.         Apr.         May         June         July         Aug.         Sept.         Oct.         Nov.           45.06         45.08         45.05         45.03          45.47         45.65         45.84          46.34           45.06         45.08         45.05         45.03          45.47         45.67         45.87          46.35           45.06         45.08         45.05         45.03          45.47         45.67         45.87          46.35           45.06         45.08         45.05         45.03          45.47         45.68         45.87          46.35           45.06         45.08         45.05         45.06          45.48         45.68         45.88          46.35           45.07         45.08         45.05         45.06         45.18          45.49         45.68         45.88             45.07         45.08         45.05         45.06         45.18          45.51         45.69         45.88

## Hale County -- Continued.

#### 263 .-- Continued.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	45.08	45.06	45.04	45.08			45.58	45.78	46.00	46.32		
24	45.08	45.06	45.04	45.08		45.45	45.58	45.79	46.00	46.33		
25	45.08	45.06	45.03	45.09		45.45	45.58		46.01	46.33	46.42	
26	45.08	45.06	45.03	45.11		45.45	45.59		46.03	46.33	46.41	
27	45.08	45.06	45.03	45.11		45.45	45.60	45.83	46.04	46.34	46.41	
28	45.08	45.06	45.03	45.11		45.46	45.61	45.83	46.05	46.34	46.41	
29	45.08	45.06	45.03	45.12		45.46	45.63	45.83	46.06	46.34	46.42	
30	45.08		45.03	45.13		45.47	45.64	45.83	46.06	46.34	46.42	
31	45.08		45.03				45.64	45.84		46.34		• • • • •

#### 304. Measurements discontinued.

- 305. Texas Land and Development Company. On strip land, 0.55 mile east of SW cor. sec. 54, blk. M14, 18.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 71.59; Nov. 15, 74.46
- 307. Texas Land and Development Company. On strip land, 0.3 mile east of SW cor. sec. 53, blk. M14, 19 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 65.07; Nov. 15, 68.40.
  - 308. Measurements discontinued.
- 314. J. S. Leach.  $NE_4^1NE_4^1$  sec. 14, blk. JK3, 17 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 45.74; Nov. 15, 48.92.
- 316. Texas Land and Development Company. NW $\frac{1}{4}$  S. D. Lemaster survey, 17.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 51.43; Nov. 15, 52.24.
- 317. Texas Land and Development Company. NEt J. F. Owens survey, 18.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 52.32; Oct. 27, 53.90; Nov. 15, 53.66.
  - 321. Measurements discontinued.
- 330. George White. NET J. M. Martin survey, 16.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 46.03; Nov. 15, 46.68.
- 338. Dr. J. H. Stewart.  $NW_2^1SR_2^1$  sec. 110, blk. D2, 20 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar.6, 47.21; Nov. 15, 48.66.
- 346. W. B. Seaman.  $NE_4^2NE_4^2$  sec. 70, blk. D2, 18 miles northeast of Hale Center. Water level, in feet below measuring point, 1940: Mar. 6, 49.45.
  - 352. Measurements discontinued.
- 355. C. N. Horne.  $SE_4^1SW_2^1$  sec. 1, blk. D6, 15.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 6, 41.51; Nov. 15, 42.99.
  - 356. Measurements discontinued.
- 357. G. D. Lewellen. SEISW sec. 8, blk. D6, 14.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 6, 38.43; Nov. 15, 39.97.
- 370. D. A. Reading.  $SE_2^{1}SE_2^{1}$  sec. 5, blk. D4, 14.5 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 5, 44.03; Nov. 15, 45.33.

## Hale County -- Continued.

402. N. R. Johnson. SwinE sec. 40. blk. JK2. 11 miles northeast of Hale Center.

Water level, in feet below measuring point, 1940

Date	Water		Water	Water		
	level Date		level	level		
Feb. 29 July 9	21.87 22.54	Sept.20 Oct. 27	23.22 23.52	Nov.	7 23.57	

- 403. Measurements discontinued.
- Measurements discontinued.
- 418. R. B. C. Howell, Jr. NW1NW1 sec. 3, blk. D6, 14.5 miles northeast of Hale Center. Used drilled domestic and stock well, diameter 6 inches, depth 38 feet. Measuring point, top of casing, 1.3 feet above land surface. Equipped with windmill.

		Water	level, i	in feet	bel	ow mea	suring po	int, 19	37-	40	
Aug. Apr. May June	26	1937 1938	27.79 29.56 29.88 29.82	June	16, 1 19	1939	30.45 30.67 31.19	Oct. Mar. Nov.	5, 7, 14	1939 1940	31.31 32.15 33.63

- 420. Measurements discontinued.
- 422. Mrs. J. B. Long.  $SW_2^1SW_2^1$  sec. 20, blk. D5, 16 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940; Mar. 7, 42.38; Nov. 15, 43.79.
- 427. C. M. Smith. NW1NW1 sec. 17, blk. D5, 17.5 miles northeast of Center. Water levels, in feet below measuring point, 1940: Mar. 6, Hale Center. Water le 50.65; Nov. 15, 53.40.
- 428. C. M. Smith.  $SW_2^1SW_2^1$  sec. 17, blk. D5, 17 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 50.63; Nov. 15, 53.26.
- 433-A. Lizzie B. Morris. SW cor. of west 186 acres in sec. 37, blk. D6, 15 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 22.58; July 9, 23.70.
- 434. Texas Land and Development Company. SW cor.  $SE_4^2NE_2$  sec. 33, blk. D6, 14.5 miles east of Hale Center. Water levels, in feet below measuring point, 1940; Mar. 7, 46.64; Nov. 14, 48.59.
- 435. Texas Land and Development Company. SW cor. NE2 sec. 35, blk. D6, 14 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 51.33; Nov. 14, 53.41.
- 456. Texas Land and Development Company.  $NW_2^1SW_2^1$  sec. 33, blk. D6, 13.5 miles east of Hale Center. Water level, in feet below measuring point, 1940: Nov. 14, 57.26.
  - 445. No measurements made in 1940.
  - 447. Measurements discontinued.
- 449. W. S. Messick. NW1NB2 sec. 10, blk. D7, 8 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 59.00; Nov. 14, 61.91.
  - 450. Measurements discontinued.
- 454. B. F. Smith. NW\(\frac{1}{2}\) sec. 21, blk. N, 16.5 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 54.12; Nov. 15, 56.96.
- 459. Texas Land and Development Company. NE\set sec. 16, blk. N, 16.5 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 42.32; Nov. 15, 45.30.

## Hale County -- Continued.

- 460. Measurements discontinued.
- 462. R. E. Keniston.  $SW_2^1SW_2^1$  sec. 16, blk. N, 16 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 44.05; Nov. 15, 47.96.
- 463. R. B. Keniston.  $SW_4^1SW_4^1$  sec. 16, blk. N, 16 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 39.54; Nov. 15, 42.23.
- 467. M. E. Courtney.  $NW_2^1NE_2^1$  sec. 25, blk. N, 13.5 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 35.50; Nov. 13, 39.80.
- 470. M. H. Neer.  $NW_2^1NW_2^1$  sec. 25, blk. D7, ll miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 33.46; Nov. 13, 33.74.
  - 472. Measurements discontinued.
- 477. C. J. Jagelky.  $NW_4^1NW_4^1$  sec. 22, blk. D7, 8 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 38.76; Nov. 13, 39.67.
  - 500. Measurements discontinued.
  - 504. Measurements discontinued.
- 508. Mrs. J. H. Slaton. SW cor. sec. 8, blk. JK2, 7.5 miles north of Hale Center. Water levels, in feet below measuring point, 1940; Mar. 4, 48.53; Nov. 14, 50.10.
- 510. R. B. Walker. NEINB sec. 9, blk. JK2, 9 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Feb. 29, 37.17; July 9, 37.52; Nov. 14, 38.06.
- 511. Dr. J. Anderson.  $NW_2^1NW_4^1$  sec. 28, blk. JK2, 10 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940; Feb. 29, 22.73; July 9, 22.67; Oct. 27, 23.80; Nov. 14, 23.92.
  - 518. Measurements discontinued.
  - 525. Measurements discontinued.
- 526. I. W. LaFrance. NE cor. NE2 sec. 44, blk. Al, 6 miles northeast of Hale Center. Water level, in feet below measuring point, 1940: Nov. 14, 57.77.
  - 533. Measurements discontinued.
  - 535. Measurements discontinued.
- 539. Fred Rastetter. SE cor.  $SE_{\frac{1}{4}}$  sec. 29, blk. A, 3.25 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 13, 58.41; Nov. 14, 59.96.
- 542. J. B. Hay.  $NE_2^4NE_2^4$  sec. 38, blk. Al, 7 miles northeast of Hale Center.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.19	37.27		37.47	37.56		37.73	37.80	37.90		38.10	38.20
2	37.19	37.27		37.48	37.57		37.73	37.81	37.90		38.10	38.20
					37.57							
4	37.19	37.28	37.40	37.49	37.57		37.73	37.82	37.91		38.11	38.19
5	37.19	37.29	37.40	37.49	37.57		37.73	37.83	37.91			37.19
6	37.19	37.29	37.40	37.49	37.57		37.74	37.83	37.91			38.17
7	37.20	37.29	37.40	37.50	37.57		37.74	37.83	37.91	38.02		38.16
8	37.21	37,29	37.40	37.50	37.57		37.74	37.84	37.92	38.02		38.15
9	37.21	37.29	37.40	37.50	37.57		37.74	37.84	37.93	38.02		38.13
10	37.22	37.30	37.40	37.50	37.57		37.74	37.84	37.93	38.03		38.13
11	37.22	37.30	37.41	37.51	37.58		37.74	37.84	37.93	38.03		38.13
12	37.23	37.30		37.51	37.58		37.75	37.84	37.93	38.03		38.13
13	37.23	37.31		37.51	37.58		37.75	37.84	37.93	38.04		38,13

#### Hale County -- Continued.

542. -- Continued.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
					37.58		37.75	37.84	37.93	38.04	••••	38.13
15	37.24	37.31		37.51	37.58		37.75	<b>37.</b> 85	37.94	38.04		38.13
16	37.24	37.31		37.51	37.59			37.86	37.95	38.04		38.12
17	37.24	37.32		37.51	37.59			37.87	37.95	38.05		
18	37.24	37.32	37.45	37.52	37.59			37.87	37.95	38.05	38.16	
19		37.33	37.45	37.52	37.59			37.87	37.95	38.05	38.17	
20		37.33	37.45	37.52	37.59			37.87	37.95	38.05	38.17	
21		37.33	37.45	37.52	37.59			37.87	37.95	38.06	38.17	
22	37.25	37.34	37.45	37.52	37.60		37.79	37.87	37.96	38.06	38.18	
23	37.26	37.34	37.45	37.52			37.79	37.88	37.97	38.07	38.18	
24	37.26	37.35	37.45	37.52		37.70	37.79	37.88	37.97	38.07	38.18	
25	37.26	37.36	37.45	37.53		37.72	37.79		37.97	38.07	38.19	
26	37.26	37.36	37.45	37.53		37.72	37.79		37.97	38,08	38.19	
27	37.26		37.45	37.54		37.72	37.80	37.89	37.97	38.08	38.19	
28	37.26		37.45	37.54		37.73	37.80	37.89	37.98	38.09	38.19	
29	37.27		37.45	37.55		37.73	37.80	37.89	37.98	38.09	38.19	
30	37.27		37.45	37.56		37.73	37.80	37.90	37.98	38.09	38.19	
31	37.27		37.45	• • • • •		• • • • •	37.80	37.90		38.10		• • • • •

547. O. C. McClain.  $NW_{4}^{1}NW_{4}^{1}$  sec. 40, blk. Al, 7 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 52.66; Nov. 14, 54.18.

549. Bennie Harris. SwinEi sec. 25, blk. Al, 7 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 57.50; Nov. 14, 59.42.

552. H. S. Dunaway.  $NE_2^1NW_2^1$  sec. 6, blk. Al, 4 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 60.04; Nov. 13, 61.50.

553. Texas Land and Development Company.  $NW_2^1NE_2^1$  sec. 6, blk. A1, 4.5 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 54.81; Nov. 13, 56.23.

564. T. F. Mounts.  $NW_2^1SW_2^1$  sec. 20, blk. Al, 2 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 13, 57.16; July 10, 57.37; Nov. 14, 57.71.

567. J. B. Maxey.  $SW_2^1SW_3^1$  sec. 19, blk. A1, 1.25 miles northeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 13, 53.62; Nov. 14, 53.90.

569. 0. C. Sanders.  $SW_{\frac{1}{2}}^1SW_{\frac{1}{2}}^1$  sec. 3, blk. Al, 1 mile southeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 54.84; Nov. 13, 56.19.

604. Measurements discontinued.

605. J. O. Douglas. NE1NE1 sec. 23, blk. 0, 11.5 miles northwest of Hale Center. Water levels, in feet below measuring point, 1940: Mar, 27, 86.13; Nov. 13, 87.39.

614. Measurements discontinued.

621. Measurements discontinued.

719-A. W. Bogart.  $NE_2^4NE_2^4NE_2^4$  sec. 22, Sabine County School Land, 15 miles southwest of Hale Center. Water levels, in feet below measuring point, 1940: Jan. 29, 77.30; Mar. 13, 77.42.

719-B. W. Bogart.  $NE_1NW_2$  sec. 22, Sabine County School Land, 17.5 miles southwest of Hale Center. Water level, in feet below measuring point, 1940: Jan. 29, 12.06.

720-B. Measurements discontinued.

416230 O - 41 - 10

# Hale County -- Continued.

- 736-A. Measurements discontinued.
- 756-B. Ross Title Ins. Company. Two miles north and 6.5 miles west of Abernathy. Water levels, in feet below measuring point, 1940: Jan. 29, 33.99; Mar. 13, 34.19; July 10, 34.53.
  - 807. Measurements discontinued.
- 816. A. M. Eason. SE1SE1 sec. 18, blk. R, 9.5 miles southeast of Hale Center. Water levels, in feet below measuring point, 1940; Mar. 7, 56.79; Nov. 13, 57.44.
  - 819. Measurements discontinued.
- 822. Elsie Thornton.  $SW_2^1SW_2^1$  sec. 37, blk. A4, 6.5 miles southeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 52.04; July 10, 52.08; Nov. 13, 52.24.
- 824. J. Wells Kinkaid.  $SW_2^1NW_2^1$  sec. 29, blk. A4, 4.75 miles south of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 64.52; July 10, 64.53; Nov. 13, 64.67.
- 825. Matilda Akeson: NW1NW2 sec. 18, blk. A4, 3.25 miles north of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 66.02; Nov. 13, 66.60.
- 828. C. W. Bigler. NW1NB1 sec. 33, blk. A4, 5 miles south of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 13, 73.73; Nov. 15, 75.01.
  - 853. Elsie Thornton. SENNE sec. 65, blk. A4, 9.5 miles south of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 13, 84.00; July 10, 84.08.
  - 834. R. E. Sikes. NEISE sec. 64, blk. A4, 8.5 miles south of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 13, 77.49; July 10, 77.51; Nov. 13, 77.89.
  - 835. S. E. Wallace.  $SE_2^1SW_2^1$  sec. 50, blk. A4, 8 miles south of Hale Center. Water levels, in feet below measuring point, 1940; Mar. 13, 59.92; July 10, 59.98, Nov. 13, 60.15.
  - 837. F. L. Hunsickar. NW1NW1 sec. 54, blk. A4, 8 miles southeast of Hale Center. Water level, in feet below measuring point, 1940; Mar. 7, 64.95.
  - 840. Debb McLaughlin. NE SE sec. 12, blk. R, 12 miles southeast of Hale Center. Water level, in feet below measuring point, 1940: Nov. 13, 62.59.
  - 848. Mrs. J. E. Cheney. SEINE sec. 75, blk. A4, 12.5 miles south of Hale Center. Water level, in feet below measuring point, 1940: Mar. 13, 96.28.
  - 852. Abernathy Cemetery. SW\(\frac{1}{2}\) sec. 2, blk. X; 15 miles south of Hale Center. Water level, in feet below measuring point, 1940: Mar. 13, 117.92.
  - 859. L. Ragland. NELSELSEL sec. 22, blk. C. L., 15.5 miles southeast of Hale Center. Water level, in feet below measuring point, 1940: Nov. 29, 78.16.
  - 906. Floyd Reagan. SWLSEL sec. 59, blk. R, 14 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 42.43; Nov. 13, 44.43.
  - 923. D. C. Bayley. NW1NW1 sec. 28, blk. R, 9.5 miles east of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 55.86; Nov. 13, 56.66.
    - 929. Measurements discontinued.
  - 936. B. E. Porter.  $NW_{2}^{1}NW_{2}^{1}$  C. K. Andrews survey, east of sec. 38, blk. R, 14 miles southeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 47.34; Nov. 13, 50.06.

#### Hald County -- Continued.

- 946. B. E. Porter. SELSEL C. K. Andrews survey, 14.5 miles southeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 59.42; Nov. 13, 61.39.
- 956. J. W. Heard. SW1NW1 sec. 7, blk. R, ll.5 miles southeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 66.54; Nov. 13, 69.03.
- 958. W. C. Sewell.  $SW_2^1NW_2^1$  sec. 9, blk. R, 12 miles southeast of Hale Center. Water levels, in feet below measuring point, 1940: Mar. 7, 59.00; Nov. 13, 60.14.
- 971. L. S. Claitor. NW cor. NW sec. 15, blk. C. L., 17.5 miles southeast of Hale Center. Water level, in feet below measuring point, 1940: Nov. 29, 62.66.
- 974-A. W. B. Mooney.  $SW_{2}^{1}NW_{2}^{1}$  J. A. Alexander survey, 17.5 miles southeast of Hale Center. Water level, in feet below measuring point, 1940: Nov. 29, 63.51.

# Hansford County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 124. L. W. Mathews. Five and one-half miles northwest of Spearman. Water level, in feet below measuring point, 1940: Apr. 10, 74.00.
- 137. S. B. Hale. Five miles northwest of Spearman. Water levels, in feet below measuring point, 1940: Apr. 10, 69.11; Aug. 7, 69.34; Dec. 5, 69.45.
- 141. J. R. Collard. Six and one-half miles northwest of Spearman. Water levels, in feet below measuring point, 1940: Apr. 10, 72.30; Dec. 5, 72.43.
  - 148. Measurements discontinued.
- 153. City of Spearman. North well. Water level, in feet below measuring point, 1940: Dec. 5, 257.65.
- 163. Panhandle Power and Light Company. Six miles west of Spearman. Water level, in feet below measuring point, 1940: Apr. 10, 80.45. Measurements discontinued.
  - 166. Measurements discontinued.
  - 228. No measurements made in 1940.
- 236. Fred McRee. Eleven miles northwest of Gruver. Water level, in feet below measuring point, 1940: Dec. 5, 170.85.
- 239. Chicago Rock Island & Gulf Railway. Depot at Gruver. Water levels, in feet below measuring point, 1940: Aug. 8, 148.19; Dec. 5, 148.02.
  - 241. Measurements discontinued.
- 243. J. H. Gruver. Seven and one-half miles west of Gruver. Water levels, in feet below measuring point, 1940: Aug. 8, 163.78; Dec. 5, 163.73.
- 244. Patton. Ten miles west of Gruver. Water levels, in feet below measuring point, 1940: Aug. 8, 181.04; Dec. 5, 180.85.
- 246. H. S. Hays. Two miles southeast of Gruver. Water levels, in feet below measuring point, 1940: Aug. 7, 174.68; Dec. 5, 174.68.
- 262. Gwinfred Lackey. Five and one-half miles south of Gruver. Water levels, in feet below measuring point, 1940: Aug. 7, 174.68; Dec. 5, 174.68.
  - 270. Measurements discontinued.
- 277. Coy Holt. Six miles south of Gruver. Mater level, in feet below measuring point, 1940: Dec. 5, 28.82.
- 289. J. J. Jones. Six and one-half miles south of Gruver. Water levels, in feet below measuring point, 1940: Apr. 10, 26.75; Aug. 7, 26.71; Dec. 5, 26.88.

# Harris County

Well numbers correspond to those in Water-Supply Papers 777, 840, 845, and 886; Harris County, Texas, Records of Wells, etc., State Board of Water Engineers, in cooperation with United States Department of Interior, Geological Survey, 1939 (mimeographed), and Progress Report of the Ground-water Resources of the Houston District, State Board of Water Engineers in cooperation with United States Department of Interior, Geological Survey, 1940 (mimeographed). When two numbers are given the second is the number in the Progress Report of the Ground-water Resources of the Houston District.

6a. C. Matthews. In Waller. No measurements made in 1936-38. Water level. in feet below measuring point. 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 16, 1939 Feb. 20, 1940 Apr. 30	17.81 16.23 14.60	June 29, 1940 Aug. 19	12.62 13.44	0ct. 7, 1940 Nov. 28	15.78 10.27

ll. J. A. Hafner. Two and one-quarter miles east-southeast of Waller. Between April 30, 1940, and June 1, 1940, measuring point raised  $7\frac{1}{8}$  inches to top of iron clamp.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Oct. 46.50 44.88 45.30 11 45.55 June 21 45.83 Feb. 20 June Nov. 28 Apr. 30 13 44.98 26 **4**5.**53** 46.65 June 1 45.53 15 44.45 Aug. 21 45.90

12. J. A. Hafner. At house 0.25 mile south of Houston-Hempstead highway, 2 miles northwest of Hockley. Used drilled domestic well, diameter 6 inches, depth 61 feet. Measuring point, top of casing, 3.0 feet above land surface. Equipped with windmill.

	Wat	ter level,	in feet	below measu	ring poin	nt, 1940	
Apr. 30	48.42	June 13	48.78	June 26	48.95	Oct. 7	48.60
June 1	48.76	15	48.68	July 16	48.52	Nov. 28	48.57
11	45.93	21	48.77	Aug. 21	48.35		

14. J. A. Hafner. One and three-quarters miles east of Waller.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level laval Feb. 20 51.95 52.60 53.60 June 29 Oct. Apr. 30 Nov. 28 51.98 51.94 Aug. 19 53.31

31. R. L. Burton. Four miles east-southeast of Waller.

	Water lev	rel, in feet	below measur:	ing point,	1940
Feb. 20	41.80	June 29	47.60	Oct. 7	45,90
Apr. 30	42.27	Aug. 21	a49.41	Nov. 28	44.00

33. W. G. Neeley. Five miles east-southeast of Waller.

	water let	rei, in reet	Delow measur	ing point, 194	£O
Feb. 20 Apr. 30		June 29 Aug. 21		0ct. 7 Nov.28	35.30 22.58

 ${\tt 35.}\,$  O. M. Taylor. Six and one-quarter miles east-southeast of Waller.

	Water let	rel, in feet	below measur	ing point,	1940
Feb. 20	27.72	June 29	27.28	Oct. 7	27.51
Apr. 30	26.89	Aug. 21	27.20	Nov. 28	26.43

a Recently pumped.

### Harris County -- Continued.

#### 36. Measurements discontinued.

40. Ira Southard. One-quarter mile south of Houston-Hempstead highway at Hockley. Used drilled irrigation well, diameter 18 inches, depth 497 feet. Neasuring point, top of 1-inch hole in pump base, 1.0 foot above land surface. Equipped with turbine pump. Water levels, in feet below measuring point, 1940: Oct. 7, 50.04; Nov. 28, 47.60.

95. H. C. Middlestead. One and three-quarters miles south-southwest of Spring.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Feb. 15	26.77	June 28	27.23	Oct. 4	27.78
May 1	26.97	Aug. 25	27.54	Dec. 5	27.32

97. Measurements discontinued.

102. C. P. Addison. Four and one-half miles south of Spring.

 Water level, in feet below measuring point, 1940

 Feb. 15
 16.75
 June 28
 17.55
 Dec. 5
 17.85

 May
 1
 16.60
 Aug. 25
 17.70

103. Measurements discontinued.

104. C. P. Addison. Four and one-half miles south of Spring.

Water level, in feet below measuring point, 1940

				O Femilia	
Feb. 20	20.05	June 28	20.40	Dec. 5	20.82
May 1	19.84	Oct. 4	21.26		

120. Ridgeview Land Co. One-quarter mile west of Gano Switch, 1/8 mile south of Houston-Hempstead highway, 3 miles northwest of Cypress. Used drilled stock well, diameter 4 inches, depth 94 feet. Measuring point, top of 4 by 4-inch wood water-pipe clamp set on casing, 2.0 feet above land surface. Equipped with windmill.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level 36.56 3 34.75 35.67 Oct. Apr. June 11 37.84 June 15 13 36.86 Nov. 30 May 10 35.29 35.34 35.75 Aug. 21 June 1 35.22

134. Ira Southard. Nine miles southwest of Cypress. Water levels, in feet below measuring point, 1940; Mar. 12, 49.80; Apr. 26, 50.13; Oct. 7, 55.23.

134a. Measurements discontinued.

136. J. Freeman. Nine miles southwest of Cypress. Water levels, in feet below measuring point, 1940: Mar. 12, 50.27; Oct. 7, 55.12.

139a. E. W. Peak. Eight and three-quarters miles southwest of Cypress. Water level, in feet below measuring point, 1940: Mar. 12, 47.47.

140. Oscar Kemp. Seven and three-quarters miles southwest of Cypress. Water levels, in feet below measuring point, 1940: Mar. 12, 45.78; Oct. 7, a/55.96.

166. E. C. Smith. One and three-quarters miles northwest of Cypress.

Water level, in feet below measuring point, 1940 June 26 Feb. 8.22 7.86 20 May 13 June 10 7.70 7.93 July 13 7.67 7.92 11 7.20 7.75 Apr. 14 21 16 30 7.74 8.25 12 7.12 7.80 May 7 7.53 27 6.99 8.60 13 Aug. 21 10.57 9 7.60 29 8.27 15 8.08 Oct. 12.87 10 7.68 30 8.22 21 8.55 Nov. 30 2.44 11 7.75 June 6 8.80

a Nearby irrigation well pumping.

# Harris County -- Continued.

167. E. C. Smith. One and three-quarters miles northwest of Cypress.

			Water level, in feet below measuring point, 1940										
Water level	Date	Water level	Date	Water level	Date	Water level							
17.15 16.45 16.45 16.94 17.95	May 11 13 14 21 27	19.28 20.02 20.24 21.40 22.23	June 1	1 19.35 6 19.40 0 20.64	June 12 13 15 21 26	20.36 19.88 19.42 18.67 (a)							
	17.15 16.45 16.45 16.94	level May 11 16.45 13 16.45 14 16.94 21 17.95 27	level         Date         level           17.15         May         11         19.28           16.45         13         20.02           16.45         14         20.24           16.94         21         21.40           17.95         27         22.23	level         Date         level         Date           17.15         May         11         19.28         May         3           16.45         13         20.02         June           16.45         14         20.24         1           16.94         21         21.40         1           17.95         27         22.23         1	level         level         level         level           17.15         May         11         19.28         May         30         21.15           16.45         13         20.02         June         1         19.35           16.45         14         20.24         6         19.40           16.94         21         21.40         10         20.64           17.95         27         22.23         11         20.52	level         Date         level         Date         level         Date           17.15         May         11         19.28         May         30         21.15         June         12           16.45         13         20.02         June         1         19.35         13           16.45         14         20.24         6         19.40         15           16.94         21         21.40         10         20.64         21           17.95         27         22.23         11         20.52         26							

169a. 160. Ben Pewe. Two and nine-tenths miles northwest of Cypress. Water levels, in feet below measuring point, 1940; Feb. 20, 15.71; Oct. 7, 22.49; Nov. 30, 17.81.

171. E. H. Juergen. In Cypress.

Water level, in feet below measuring point, 1940							
Date	Water level	Date	Water level	Date	Water level		
Feb. 20 Apr. 30	19.61 19.08	June 29 Aug. 21	18 <b>.6</b> 5 18 <b>.</b> 78	0ct. 3 Nov. 30	19.09 18.29		

178. K. P. Black. Five miles southeast of Cypress.
Water level, in feet below measuring point, 19

	Maret Tel	er, in reer	Delow measur	ing point,	1940
Feb. 20	7.78	June 29	8.52	Oct. 3	15.97
May 1		Aug. 21	b19.94	Nov. 30	6.19

182. Joel Schmidt. Four and one-half miles south of Cypress. Water levels, in feet below measuring point, 1940: Jan. 3, 34.12; Mar. 13, 33.68; Apr. 26, 33.67; Oct. 4, 42.10.

183. J. J. Sweeney. Five and three-quarters miles south of Cypress. Water levels, in feet below measuring point, 1940: Jan. 3, 31.65; Feb. 13, 31.25; Apr. 26, 31.27; Oct. 4, 38.54.

186. Tucker. Six miles south-southwest of Cypress. Water levels, in feet below measuring point, 1940: Jan. 3, 31.67; Mar. 13, 30.82; Oct. 4, 38.96.

187. Joel Schmidt. At house on Barker-Cypress road, 2 miles north of Spencer road. Unused drilled domestic well, diameter 4 inches, depth 31.5 feet. Measuring point, top of casing, 2.3 feet above land surface. Equipped with pitcher pump.

Water level, in feet below measuring point, 1940

Date		Water level	Date	Water level	Date	Water level	Date	Water level
May	11 13 21 27 29 30	21.91 21.76 21.81 21.76 21.64 21.94	June 1 3 6 10 11	21.49 21.82 21.67 21.47 21.74	June 12 13 15 21 26	21.76 21.66 21.57 21.84 21.35	July 1 16 Aug. 21 Oct. 7 Dec. 6	22.05 21.90 21.98 22.13 22.24

205. Humble Pipe Line Co. Six and one-quarter miles southeast of Cypress.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level 35.16 37.35 Aug. 21 Nov. 30 37.63 May June 29 36.85 Oct. 3 38.60

a Measurements discontinued.

b Nearby well pumping.

### Harris County -- Continued.

206. R. B. Tucker. Six and one-half miles southeast of Cypress. Water levels, in feet below measuring point, 1940: Feb. 20, 30.40; May 1, 29.84; June 29, 36.22; Nov. 30, 32.80.

210. Seven and one-quarter miles southeast of Cypress.

Water	level.	i.n	feet	below	measuring	point.	1940
****	TO 10 T	****	1000	0070#	TITO CE DICT TAME	DOTIEG !	, 40 10

Date	Water level	Date	Water level	Date	Water level
Feb. 20	22.75	June 29	27.43	0ct. 3	29.98
May 1	22.69	Aug. 21	29.51	Nov. 30	24.19

221. S. Terpstra. Ten and three-quarters miles east of Cypress. Water level in feet below measuring noint 1940

	METAL TA	ver, in reet	perom measur.	ing boil	16,	1940
Feb. 15 May 1		June 28 Aug. 21		Oct. Dec.		42.16 39.80

225. Trinity & Brazos Valley Railroad Co. Eleven and one-half miles east-southeast of Cypress.

	Water le	vel, in feet	below measur	ing poi	nt,	1940
Feb. 15	34.55	June 28	36.83	Oct.	3	39.85
May 1	34.23	Aug. 21	38.98	Dec.	6	37.69

254. Measurements discontinued.

255. J. M. Blake. Two and one-half miles west-northwest of Aldine.

Water level, in feet below measuring point, 1940 21.06 20.08 25.39 Feb. 15 June 28 Oct. 4 May 19.05 Aug. 20 a27.50 20.70 Dec.

256. J. M. Blake. On Houston-Conroe road, 14 miles north of Houston Post Office.

	Water lev	vel, in feet	below measur	ing point,	1940
Feb. 15 May 2		June 28 Aug. 20		Oct. 4 Dec. 5	39.29 39.26

264. H. Weary. Three miles north of Aldine.

	Water lev	vel, in feet	below measur	ing point,	1940
Feb. 15	39.68	June 28	40.10	Oct. 4	41.80
Мау 2	b39.60	Aug. 20	40.89	Dec. 5	c41.71

264a. Fifteen hundredths mile south of well 264 on Hardy Street, opposite mile post 135 on Missouri Pacific Railroad.

	Water lev	rel, in feet	below measur	ing point,	1940
Feb. 15	15.03	June 28	11.32	Oct. 4	15.09
May 2	10.53	Aug. 20	13.25	Dec. 12	12.57

302. Rebel 0il Company. Three and one-half miles southeast of Humble. Water levels, in feet below measuring point, 1940: Feb. 15, 38.36; June 28, 39.20; Oct. 4, 40.59.

A. E. Thompson. Five and three-quarters miles north of Katy. Water levels, in feet below measuring point, 1940; Mar. 12, 52.55; Oct. 7, 62.12.

357. P. V. Cook. Four and one-half miles north-northeast of Katy. Water levels, in feet below measuring point, 1940: Mar. 12, 43.09; Apr. 26, 44.71; well abandoned.

362. E. G. Stockdick. Four miles northeast of Katy. Water levels, in feet below measuring point, 1940: Mar. 12, 43.60; Apr. 26, 43.10; Oct. 4, 55.56.

a Pumping.

b Pond has apparently leaked into casing at times. c Water 2 feet deep around well.

#### Harris County -- Continued.

- 367. W. C. Hickman. Three and one-quarter miles east-northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 46.03; Mar. 12, 44.75; Apr. 26, 44.52; Oct. 4, dry at 52 feet.
- 370. J. M. Johnson. Three miles east of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, a/45.86; Mar. 13, 44.44; Apr. 26, 44.06; Oct. 7, 56.08.
- 371. L. E. Morrison. Three miles southeast of Katy. Used drilled irrigation well, diameter 24 inches, depth 374 feet. Measuring point, top of casing, 0.5 foot above land surface. Equipped with turbine pump.

	Wate	r level	, in feet b	oelow measuring	point,	1939-40	
Date		Water level	Date	Water level	Date		Water level
	6, 1939 3, 1940		Mar. 13, Apr. 26	1940 41.74 41.66	Oct.	4, 1940	51.58

- 381. Seven and one-half miles northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 33.13; Mar. 13, 32.70; Apr. 26, 32.84.
- 382. C. Stockdick. Six miles northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 41.65; Mar. 13, 40.44; Apr. 26, 40.04; Oct. 4, 53.34.
  - 383. Measurements discontinued.
- 384. A. J. Jordan. Six miles northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 44.23; Mar. 13, 42.62; Apr. 26, 42.11; Oct. 4, 55.40.
- 385. A. J. Jordan. Six miles northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 43.15; Mar. 13, 42.29; Apr. 26, 42.15; Oct. 4, 50.81.
- 399. Gertie Rice Farm. Nine and one-half miles northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 30.45; Mar. 13, 30.13; Apr. 26, 30.09; Oct. 4, 35.00.
- 400. Schmidt Estate. Eleven miles northeast of Katy. Water levels, in feet below measuring point, 1940: Jan. 3, 29.20; Apr. 26, 28.95; Oct. 4, 34.33.
- 456. Frank Willberg. On Hempstead road, 0.5 mile southeast of Fairbanks. Unused drilled irrigation well, diameter 6 inches, depth 230 feet. Measuring point, top of casing 0.25 foot above land surface.

		Water	level,	in feet below:	measuring p	oint, 1931, 193	39 <b>- 4</b> 0
Apr.	2.	1931	30.00	June 29, 194	0 41.20	Oct. 3, 1940	44.13
Dec.				Aug. 21		Nov.30	43.94

- 512. Ed Nichols. Eight and one-half miles west-northwest of Houston Post Office. Water levels, in feet below measuring point, 1940: Feb. 16, 9.58; June 29, 9.10; Aug. 21, 12.50; Nov. 30, 7.89.
- 519. Felix Meyers. Six and three-quarters miles west-northwest of Houston Post Office. Water level, in feet below measuring point, 1940: Feb. 16, 13.3.
- 602. River Oaks Country Club. Four miles north of Houston Post Office.

	Water le	vel, in feet	below measur	ing point,	1940
Jan. 15	65.36	June 25	73.68	Oct. 2	79.80
May 3	67.90	Aug. 5	76.04	Nov. 28	73.66

604. West End Ice Company. Two and one-half miles northwest of Houston Post Office.

Water level, in feet below measuring point, 1940

Jan. Feb.	68.29 67.90		68.20 74.80	Nov.	28	73.41

a Measuring point lowered 0.1 foot to top of casing.

### Harris County -- Continued.

606. Henke & Pillot. Two miles west-northwest of Houston Post Office.

Water level in feet below measuring point 1940

	Wat	er level,	in feet	perow mea	suring poin	nt, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15 Feb. 20	82.22 84.76	May 3 June 25	87.21 89.36	Aug. 6	93.09 96.80	Nov. 28	92.30

608. Fidelity Products Company. One and three-quarters miles west-northwest of Houston Post Office.

Y	ater level,	in feet	below m	easuring	point	1940	
Jan. 15 76.92 Feb. 20 75.40	May 3 June 25	79.44 84.69	Aug.	6 87 2 87	.17	Nov. 28	84.14

609. Fidelity Products Company. One and three-quarters miles west-northwest of Houston Post Office.

	Wat	er leve	1, i	1 feet	below r	neası	ring poin	nt, 1940	
Jan. 15 Feb. 20	86.92 89.18		3 5	91.79 94.23	Aug.	.6 2	98.54 102.17	Nov. 28	97.19

610. No measurements made in 1940.

 $\,$  619. City of Houston. One and one-half miles west-northwest of Houston.

		Wa	ter lev	el,	in feet	below measu	iring poi	nt, 1940	
Jan.	2	80.37	Mar.	25	85.34	June 10	91.93	Aug. 31	101.65
	9	83.17	Apr.	1	84.73	17	94.46	Sept. 7	100.59
	15	83.96	-	8	86.10	24	95.04	14	101.82
	29	85.86		15	87.28	July 1	90.80	21	102.62
Feb.	5	85.54	1	22	88.60	8	94.50	28	101.49
	12	88.89		29	87.94	22	94.92	Oct. 5	101.02
	19	85.33	May	6	89.06	27	98.44	12	101.62
	26	83.45	1	13	89.69	Aug. 3	98.60	Nov. 19	93.89
Mar.	5	83.39	I	20	89.78	10	99.66	26	94.73
	11	86.84		22	91.04	17	100.32	Dec. 3	95.43
	18	87.30	June	4	92.97	24	100.70	, 18	93.74

620. Public Laundries. At 1601 West Webster Street in Houston. Water level, in feet below measuring point, 1940; Jan. 14, 103.57; May 26, 114.10; Aug. 25, 130.80; Dec. 1, 113.60.

65la. A. Wilke. Nine miles north of Houston Post Office.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level Feb. 14 58.57 Oct. 64.00 June 27 60.34 2 2 59.27 Aug. 20 62.10 Dec. 5 63.43 May

65lb. A. Wilke. Nine miles north of Houston Post Office.

		water le	vel, in feet	below measur	ing poir	it, li	940
Feb.	14	12.07	June 27	12.54	Dec.	5	12.00
May	2	10.74	Aug. 20	14.55	Į.		

 $65\mbox{lc.}$  J. W. Follis. Gulf Bank Road, 0.55 mile east of U. S. Highway 75.

		water 1e	ver, in reet	below measur	ing poi	nt,	1940
Feb.	14	51.02	June 27	52.27	Dec.	5	55.28
May	2	51.44	Oct. 2	55.25			

65ld. Eight miles north of Houston Post Office.

	Water le	vel, in feet	below measur	ing point,	1940
Feb. 14	62.78	June 27	64.78	Oct. 2	68.33
May 2	63.64	Aug. 20	66.42	Dec. 5	68.04

### Harris County -- Continued.

654a. H. C. Meyers. One-quarter mile north-northwest of Beaumann's ranch house. Water levels, in feet below measuring point, 1940: Feb. 14, 0.78; May 2, 0.28; Aug. 20, 0.96; Dec. 5, 0.90.

656. Texas Creosoting Company. Four and one-half miles north of Houston Post Office.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Feb. 14 May 2	89.74 94.00	June 27 Aug. 8	94.75 96.70	0ct. 2	98.92

662. South Texas Cotton 011 Company. Two and one-half miles north-northeast of Houston Post Office. Water levels, in feet below measuring point, 1940; Feb. 14, 95.39; June 27, 98.92; Oct. 2, 107.45; Nov. 26, 102.43.

663. South Texas Cotton Oil Company. Two and three-quarters miles north-northeast of Houston Post Office.

	Water le	vel, in feet	below measur	ing point,	1940
Feb. 14	71.46	June 27	75.95	Nov. 26	76.10
May 2	73.48	Aug. 8	78.27		

665. National Lumber and Creosoting Company. Two and three-quarters miles north-northwest of Houston Post Office.

	Water lev	rel, in feet	below measur	ing point,	1940
Feb. 14	71.43	June 27	74.28	Oct. 2	77.78
May 2	72.35	Aug. 8	75.90	Nov. 26	75.13

666a. 623. Houston Foundry & Machine Company. At 2005 White and Weber Streets, Houston.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Jan. 15 Feb. 20 80.99 May 82.32 Aug. 88.98 Nov. 28 89.19 86.38 80.12 June 25 Oct. 2 91.30

677. Houston Light and Power Company. Cable Street and Buffalo Bayou in Houston. Water levels, in feet below measuring point, 1940; Jan. 17, 103.6; Feb. 24, 109.5; May 3, 116.3; Oct. 11, 118.96.

 $680.\ \,$  Houston Electric Company. One-half mile northeast of Houston Post Office.

Water levels, in feet below measuring point, 1940 64.28 74.29 10 76.91 Aug. 31 93.02 Jan. 2 Mar. 25 June Sept. 7 76.52 93.55 9 62.83 Apr. 1 73.77 17 15 63.15 77.75 8 73.46 24 77.04 95.72 July 21 29 15 72.00 79.07 97.00 1 Feb. 75.58 8 77.78 28 91.70 5 22 73.04 12 71.94 29 72.75 20 79.07 Oct. 90.59 69.37 May 27 80.34 12 90.02 19 6 72.79 19 83.09 67.89 13 75.52 85.35 26 Aug. 3 Nov. Mar. 67.85 20 77.88 10 87.78 26 81.00 4 71.23 89.21 11 76.57 17 Dec. 80.27 72.40 90.59 10 79.15 18 June 75.89 24

 $695.\ \,$  Harris County Courthouse. One-quarter mile north-northeast of Houston Post Office.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 17	58.98	May 2	59.25	Aug. 6	<b>62.3</b> 8
Feb. 24	58.31	June 27	61.36	Oct. 3	<b>64.</b> 70

### Harris County -- Continued.

738. Houston Packing Company. One and one-half miles east of Houston Post Office.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 17	69.76	May 3	69.91	Aug. 6	70.83
Feb. 24	69.81	June 27	70.28	Oct. 3	71.87

741. No measurements made in 1940.

748. Gulf Pipe Line Company. Five miles northeast of Houston Post Office. Umuşed drilled industrial well, diameter 6 inches, depth 721 feet. Measuring point, top of casing 2.5 feet above land surface.

Water level, in feet below measuring point, 1911, 1931, 1939-40 Nov. --, 1911 Jan. 14, 1931 June 8 July 10, Nov. a+4.00 1939 71.10 Aug. 24, 1939 72.87 50.20 11 71.08 Sept.29 74.24 8, 70.96 13 70.20 Oct. 31 75.68 30 70.78 14 70.65 Dec. 14 75.70 July 2 70.90 15 70.87 Feb. 14, 1940 76.07 4 71.00 18 70.78 May 2 77.47 24 71.25 June 27 5 71.01 79.95 6 81.33 70.99 Aug. 71.64 Aug. 8 7 71.02 8 71.80 Oct. 3 84.96 8 71.08 Nov. 26 83.49 15 72.00 9 71.13

751. The Texas Pipe Line Company. Six miles east-northeast of Houston Post Office.

	Water level	, in feet	below measurin	g point, 1940	
Feb. 14	85.40	June 27	89.17	Oct. 3	94.35
May 2	86.91	Aug. 8	90.86	Nov. 26	92.79

 $757.\$  Layne-Bowler Company. Four and one-quarter miles east of Houston Post Office.

	Water	· level,	in feet be	low mea	suri	ing_point,	1940	
Date	Water level	Date	Water level	Date		Water level	Date	Water level
Feb. 14 May 2	90.74 92.66	June 2		Aug. Oct.	8 3	695.5 100.00	Nov. 26	96.00

759. Port City Compress & Warehouse Company. Four and three-quarters miles east of Houston Post Office.

Water level, in feet below measuring point, 1940

				<del>~ - /</del>	
Date	Water level	Date	Water level	Date	Water level
Feb. 14 May 2	95.51 98.02	June 27 Aug. 8	99.45 101.56	Nov. 26	103.20

 $783.\ \ \mbox{Houston}$  Riding & Polo Club. Six miles west of Houston Post Office.

	Water	level,	in feet bel	low measuri	ing point,	1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15 Feb. 20		Mar. 23 Apr. 26		June 25 Aug. 5		Oct. 2 Nov. 28	58.15 56.75

787. American Service Company. Two and one-half miles west-southwest of Houston Post Office.

Water	r level, in	feet bel	low measuri	ng point,	1940	
Jan. 15 71.69 Feb. 20 - 72.10	Mar. 23 Apr. 26		June 25 Aug. 5	76.85 78.58		

b Air line measurement.

a Flowed 40 gallons a minute.

#### Harris County -- Continued.

787a. 779. American Service Company. At 1623 Westheimer Street in Houston. Water levels, in feet below measuring point, 1940; Jan. 15, 74.94; Feb. 20, 74.65; Oct. 2, 87.83; Nov. 28, 81.75.

787b. 780. Hollyfield Laundry Company. At 1733 Westheimer Street in Houston.

Water level, in feet below measuring point, 1940 Water Water Water Dete Date Date level level level Jan. 73.97 May 74.85 81.74 14 26 Dec. 1 Feb. 25 73.64 Aug. 25 84.49

788. Shepherd Laundries. At 2400 Louisiana Street in Houston.

790. Southern United Ice Company. Two miles south-southwest of Houston Post Office.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level 82.74 Jan. 16 74.94 Apr. 24 77.10 Aug. 85.52 Nov. 27 Feb. 21 74.31 June 25 82.72 86.65 Sept.30

798. Rice Institute. Three and one-half miles southwest of Houston Post Office.

1940 Water level, in feet below measuring point Jan. 16 65.81 Apr. 24 67.40 Aug. 72.42 Nov. 27 71.15 June 25 73.94 Feb. 21 66.83 69.90 Oct. 2

798a. 778. H. C. Weiss. South Main and Sunset Streets in Houston.
Water level, in feet below measuring point, 1940

Water Water Water Date Date Date level level level 77.74 83.15 Jan. 16 76.15 Apr. 24 Oct. Feb. 21 June 25 Nov. 27 80.76 75.62 80.60

802. West University Place. Five and one-half miles west-southwest of Houston Post Office.

Water level, in feet below measuring point, 1940 Jan. 15 52.83 Apr. 24 54.03 5 57.15 Aug. Feb. 20 52.76 June 25 55.63 Oct. 2 59**.45** 

804. West University Place. Five and one-half miles west-southwest of Houston Post Office.

Water level, in feet below measuring point, 1940

Jan. 15 60.26 Apr. 24 62.45 Aug. 5 64.70

Feb. 20 61.10 June 25 63.80 Oct. 2 (a)

807a. City of Bellaire. Rice and Jessamine Streets at water tower in Bellaire. Water levels, in feet below measuring point, 1940: Jan. 15, 50.60; Apr. 24, 53.24; Aug. 5, 56.50; Nov. 27, 56.56.

809. Gem Electric and Ice Company. In Bellaire.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level 62.70 71.39 Jan. 15 Apr. 24 63.88 Aug. Nov. 27 71.95 62.96 Feb. 20 June 25 66.75 Oct. 2 73.68 Well sealed.

# Harris County -- Continued.

820. Institute Place. Almeda Road, 5.5 miles south-southwest of Houston Post Office.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 16	37.16	Apr. 24	38.06	Aug. 5	39.34
Feb. 21	37.36	June 25	38.43	Sept.30	40.45

853. Port City Ice Company. At 2715 McKinney Avenue in Houston.

Water level, in feet below measuring point, Water Water Water Nator Date Date Date Date level level level level Jan. 17 Feb. 24 116.01 93.82 112.04 96.45 8 Nov. 22 May Aug. 116.65 94.48 June 27 112.90 Oct. 1

854. Port City Ice Company. One mile southeast of Houston Post Office. Water levels, in feet below measuring point, 1940: June 27, 120.94; Aug. 8, 114.24; Oct. 1, 113.7; Nov. 22, 107.19.

868 . Hughes Tool Company. Three miles southeast of Houston Post Office.

Water level, in feet below measuring point, 1940 Jan. 17 70.48 May 3 73.03 Aug. 6 77.21 Nov. 22 73.91 Feb. 24 71.15 June 27 75.59 Oct. 77.15

876. Houston Country Club. Three and three-quarters miles southeast of Houston Post Office.

Water level, in feet below measuring point, 1940 Jan. 75.95 89.77 17 Мау 3 81.66 July 30 85.50 Oct. 78.02 June 27 Feb. 24 22 85.00 84.41 Aug. 6 86.90 Nov.

878. Houston Compress Company. Anderson-Clayton Turning Basin in Houston. Water levels, in feet below measuring point, 1940: Jan. 17, 81.57; Feb. 24, 83.5; Oct. 1, 97.1; Nov. 22, 94.0.

881. Terminal Compress & Warehouse Company. Eighty-second and Harrisburg Streets in Houston.

Water level, in feet below measuring point, 1940 Jan. 17 83.25 3 88.15 92.18 94.02 May Aug. Nov. 22 Feb. 24 85.12 June 27 89.70 Oet. 95.48 1

883. Tennessee Coal and Iron Railroad Company. U. S. Steel. Near Morgan Line Docks on Bayou, 6.75 miles southeast of Houston Post Office.

Water level in feet below measuring point, 1940 Water Water Water Date Date Date level level level 122.00 Feb. 14 107.83 June 27 114.37 Oct.

119.36

Nov. 26

119.98

886. Phoenix Refinery. Bowle and San Antonio Streets, 5.5 miles southeast of Houston Post Office.

Мау

6

110.79

Aug. 8

in feet below measuring point, Water level 1940 Mar. 78.21 June 26 82.01 Oct. a82.89 3 May 79.47 Aug. 83,80 Nov. 22 82.28

890. Texas Chemical Company. Six miles southeast of Houston Post Office. Water levels, in feet below measuring point, 1940: Feb. 24, 102.51; June 26, 108.06.

a Measuring point lowered 2.5 feet to new top of casing.

### Harris County -- Continued.

898a. 913. Allen Estate. Park Place Boulevard and Poplar Street in Houston.

	Water	level,	in feet belo	w measurin	g point,	1940	
Date	Water level	Date	Water level	Date	Water . level	Date	Water level
Jan. 17 Feb. 21	82.13 83.40	May June 2	3 84.67 26 87.35	July 31 Aug. 7	89.73 90.49	Oct. 1 Nov. 22	93.97 92.61

905. City of Houston Prison Farm. Mykawa Road near Garden Villas, 7.5 miles south-southeast of Houston Post Office. Used drilled industrial well, depth 1,900 feet. Measuring point, top of inner pump base, at land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1931, 1939-40 Water Water Water Date Date Date level level level Dec. 18, June 26, 31.88 1931 15.94 1939 29.19 1940 Apr. 10, Jan. 17, 1940 1939 May 10 July 28 27.03 32.43 29.51 Aug. 27.51 Feb. 21 30.10 Sept.30 33.20 Aug. 30 May 27.79 .3 31.14

1019. Captain Crotty. Morgans Point, bank of channel, north of U. S. Engineers Reservation, Houston.

Water level, in feet below measuring point, 1940										
Date	Water level	Date	Water level	Date	Wat lev	ter vel Date	Water level			
Jan. 17 Feb. 21	61.92 64.40	May ( June 20	62.89 65.87	Aug. Oct.	8 67 1 67		22 65.39			

1020. U. S. Engineers Reservation. Morgans Point, Houston. Water level, in feet below measuring point, 1940 Jan. 17 59.02 64.87 Nov. 22 62.58 Mav 6 61.02 Aug. 8 Feb. 21 61.36 June 26 62.92 Oct. 1 64.27

1101a. 1100. M. M. Graves Estate. Eight and one-half miles east-northeast of South Houston.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level 92.75 Apr. 29 93.67 Oct. 97.80 Jan. Feb. 21 93,59 Aug. 8 98.64 Nov. 22 96.42

1104. City of La Porte. La Porte water plant. Used drilled public supply well, diameter 10 inches, depth 570 feet. Measuring point, top of tee in air line, 1.0 foot above land surface. Equipped with air lift.

 Water level, in feet below measuring point, 1940

 May 31
 a80.90
 Aug. 8
 84.01
 Nov. 22
 82.96

 June 26
 82.58
 Oct. 1
 a84.84

1105. A. A. Womack. Thirteen miles east of South Houston.

Water level. in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Jan. 60.78 17 60.23 May 6 June 26 61.33 Oct. 62.60 31 Feb. 21 60.75 60.82 Aug. 62.34

1152a. 1150. City of Galena Park. In Galena.
Water level, in feet below measuring point.

	WAUGI TOYO.	, AH 1000	DOTON WORDSTT	5 pormo, roro	
Date	Water level	Date	Water level	Date	Water level
May 6 June 27	110.20 112.88	Aug. 8 0ct. 3	116.68 117.95	Nov. 22	118.87

a Nearby well pumping.

# . Harris County -- Continued.

1154. Universal Water Company. Four and three-quarters miles north of South Houston in Galena Park.

	Water level	, in feet b	celow measuring	point, 1940	
Date	Water level	Date	Water level	Date	Water level
Feb. 14 May 6	79.28 79.75	June 27 Aug. 8	80.49 80.40	Oct. 3 Nov. 22	81.30 81.29

1161. Sinclair Refining Company. Three miles north of South Houston.

Water level, in feet below measuring point, 1940

(from recorder charts)

Date		Water level	Date		Water level	Date	Water level	Date	Water level
Jan. Feb.	2 9 15 29 5 12 19 26 4 11 18	110.25 109.13 109.99 115.05 114.57 111.02 108.54 108.88 108.79 113.58 112.14	Apr. May June	8 15 22- 29 6 13 20 31 3 10	113.50 115.29 117.01 115.87 114.96 116.51 117.22 117.66 119.75 118.78 118.04	July 1 8 20 27 Aug. 3 10 17 24 31 Sept. 7	120.77 120.93 123.87 125.50 126.37 126.97 128.10 128.30 125.85 126.97	Sept.28 Oct. 5 12 30 Nov. 8 14 19 26 Dec. 3 14	127.91 127.41 128.05 128.20 126.50 126.31 125.33 124.74 122.31 123.40
Apr.	25 1	112.60 114.06		24	117.61	21	128.72	<b>3</b> 0	122.43

1170. Houston Light and Power Company. Deep-water plant, 4.25 miles north of South Houston.

			Water leve	l, in feet	below measuring	g point, 1939-40	
Date			Water level	Dat'e	Water level	Date	Water level
July	21, 31	1939	100.5 96.0	Apr. 19,	1940 108.5 115.0	July 26, 1940 Aug. 1	118.0
Aug.	4 26		98.5 105.5	May 3	108.5 109.5	16 30	. 118.5 116.5
Oct.	13 20		105.5	17 31	110.5 111.5	Sept.13	115.5 119.5
Nov. Dec.	3		104.0	June 7	113.5 112.0	Nov. 1 26	122.5 120.5
Mar.	14, 22	1940		21 28	115.0 114.5	Dec. 5	116.0 114.5
Apr.	29 5		110.5 109.5	July 5	111.0 111.5	27	115.0

1174. Measurements discontinued.

1176. The Texas Company. At refinery in Galena Park, 5.25 miles north-northeast of South Houston.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Jan. 61.44 69.63 Aug. 24 74.69 Mar. 18 65.41 June g 74.09 61.49 64.78 10 68.25 69.13 69.90 70.71 15 62.25 64.64 17 Sept. 73.51 Apr. 65.67 66.19 8 29 62.87 73.80 Feb. 62.51 15 28 74.32 July 12 61.36 8 22 66.77 70.01 Oct. 74.03 19 67.11 20 72.13 72.45 29 61.32 72.67 19 71.70 26 6 66.19 May Nov. 4 a64.73 Aug. Mar. 67.37 73.28 71.54 8 65.15 20 68.03 10 73.87 Dec. 70.85 11 65.02 27 68.36 17 74.11

a Measuring point raised 3.36 feet to top of 8-inch riser on casing.

## Harris County -- Continued.

1182. Port Terminal Railroad Company. Southeast corner of Crown Refinery.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Jan. 128.14 Feb. 26 123.93 Apr. 15 131.42 May 128.39 137.21 127.74 127.02 9 123.83 Mar. 22 135.13 3 4 June 26 15 124.99 11 132.55 29 127.49 29 133.40 18 130.48 125.38 Aug. 139.90 Мау 6 8 124.42 Oct. Feb. 5 132.09 25 124.99 13 1 137.65 12 122.34 Apr. 1 132.50 20 127.34 Nov. 22 141.38 8 129,52 19 117.48

1187. City of Pasadena. Three and one-half miles north-northeast of South Houston. Water levels, in feet below measuring point, 1940: Feb. 21, 119.40; Aug. 8, 130.73; Nov. 22, 132.94.

1187a. 1231. City of Pasadena. Three and one-half miles north-northeast of South Houston. Water levels, in feet below measuring point, 1940: Jan. 17, 121.90; Feb. 21, 118.97; Aug. 8, 133.59; Nov. 22, 134.08.

1194. No measurements made in 1940.

1194a. 1232. Deepwater Quadrangle, 0.5 mile south of Deepwater railroad station.

	Water	level, in	feet be	low meas	uri	ng point,	1940		
Jan. 17	96.54	Apr. 29	97.53	Aug.	8	102.01	Nov.	22	100.66
Feb. 21	97.38	June 26	99.13	Oct.	1	102.61			

1194b. Deepwater Quadrangle, 0.5 mile south of Deepwater railroad station.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level 17.37 16.76 Jan. 17 June 26 Oct. 18.00 Feb. 21 17.50 Aug. 16.66 8

1205. City of South Houston. At water plant. Used drilled public supply well, diameter 8 inches, depth 668 feet. Measuring point, top of 3/4-inch opening in reducer on top of special 1½-inch measuring pipe, 1.5 feet above land surface. Equipped with electric turbine pump. Water levels, in feet below measuring point, 1940: Aug. 7, 74.77; Nov. 22, 79.38.

1209. Fireworks Company. One-half mile southeast of South Houston.

		Water	level,	in feet	be:	low me	asuring po	oint,	1939	-40	
Jan.	27,	1939	55.24	July	7,	1939	56.57	Oct.	30,	1939	57.51
Mar.	6		55 <b>.4</b> 9	1	8		56.58	Dec.	12		58.00
Apr.	23		55 <b>.4</b> 9	ŀ	9		56.56	Jan.	17,	1940	57.57
May	22		55,56		10		56,58	Feb.	21		58.31
June	26		56.25	1 .	14		56.35	May	. 3		59.04
July	1		56.43	1	15		56.35	June	26		59.69
	3		56.52		21		56.28	Aug.	7		60.15
	4		56.50	Aug.	24		57.03	Oct.	1		61.40
	5		56.49	Sept.			57.84	Nov.	22		62.08
	6		56.51	_							

### Hartley County

Well numbers correspond to those in Water-Supply Paper 886.

250. Four and one-half miles northwest of Hartley. Water levels, in feet below measuring point, 1940: Apr. 12, 321.87; Aug. 8, below 320 feet.

297A. No measurements made in 1940.

### Hays County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

106. Henry Armbruster. Ten feet north of elevated steel tank, 1.25 miles northwest of Buda. Used drilled domestic and stock well, diameter 6 inches, depth 240 feet. Measuring point, top of casing, 0.75 feet above land surface. Equipped with gasoline engine.

Water level, in feet below measuring point, 1937, 1940 Water Water Water Date Date Date leve1 level level 162.74 167.73 Dec. 1937 155.61 Mar. 25, 1940 Apr. 27 June 24, 1940 Jan. 9, Feb. 27 1940 167.01 165.97 July 29 157.60 166.86 167.17 Aug. 26 160.76 May 28

110. M. O. Rogers. About 100 feet south of county road, about 100 feet east of rock house, 7 miles west of Buda. Used drilled stock well, diameter 6 inches, depth 110 feet. Measuring point, top of iron water pipe clamp, 0.2 foot above land surface. Well drilled 30 feet deeper between Nov. 4, 1937 and Jan. 8, 1940.

		Water	level,	in feet	t be	low me	asuring p	point, 1937,	1940	
Nov. Jan. Feb. Mar.	8, 26		52.29	Apr. May June	24	1940	50.87	Aug. 26, Sept.27 Oct. 30	1940	56.70 53.41 53.63

126. One hundred feet east of county road, 9.75 miles west of Buda. Seldom used drilled domestic well, diameter 8 inches, depth 127 feet. Measuring point, top of casing, 1.4 feet above land surface. Equipped with rope and bucket.

	Water level,	in feet below me	easuring point, 1937, 1940	
Nov. 26, Jan. 9.		Apr. 29, 1940 May 24	98.43 Aug. 26, 1940	97.48 97.61
Feb. 26		June 24	98.37   Sept.27 98.12   Oct. 30	97.38
Mar. 25	102.79	July 26	97.54 Dec. 5	96.32

127. M. G. Michaelis. About 300 feet north of county road, 6.25 miles southwest of Buda. Used drilled domestic and stock well, diameter 6 inches, depth about 250 feet. Measuring point, top of iron water pipe clamp, 1 foot above land surface. Equipped with windmill.

		Water level,	in	feet	below measuring	point, 1940	)
Jan.	9	185.60	Apr.	29	185.70	Sept.27	184,95
Mar.	25	186.82	Aug.	29	184.82	0ct. 30	185.26

234-A. N. E. Hughes. About 150 feet south of well 677-A, 0.25 mile northwest of Wimberly. Used drilled domestic well, diameter 5½ inches, depth 162 feet. Measuring point, top of easing, 2.3 feet above land surface. Flowing well on Apr. 28, 1938. Equipped with automatic pump since Feb. 28, 1940.

	Water	level,	in fee	t bel	low me	asuring po	oint, 1938	, 1940	
Apr. 28, Feb. 28, Mar. 27 Apr. 30		14.02	May June July Aug.	25 29	1940	17.34 17.84 18.15 18.34	Sept.23, Oct. 28 Dec. 6	1940	18.20 18.27 18.31

348. P. K. Karnes. At house on hilltop, about 300 feet northeast of State Highway 80, 1.25 miles northwest of San Marcos. Used drilled domestic and stock well, diameter 6 inches, depth 365 feet. Measuring point, lower edge of notch in north side of casing, 0.5 foot above land surface.

	Water	level,	in fee	t be	low mea	suring po	oint, 1937	, 1940	
Oct. 5, Jan. 23, Mar. 25 Apr. 29	1940	260.14 254.76 254.60 254.51	July Aug.	26	1940	254.72	Sept.27, Oct. 29 Dec. 5	1940	255.51 255.20 253.77

a Above measuring point.

### Hays County -- Continued.

349. E. Brooks. About 100 feet west of county road, about 300 feet south of State Highway 80, 1.75 miles northwest of San Marcos. Used drilled domestic and stock well, diameter 6 inches, depth 176 feet. Measuring point, top of iron water pipe clamp, 0.6 foot above land surface. Equipped with windmill.

Water level, in feet below measuring point, 1937, 1940 Water Water Water Date Date Date level level Oct. 1937 164.39 Apr. 27, 1940 165,00 Sept.27, 1940 165.79 165.64 Jan. 9, ·1940 26 165.79 164.76 July 1 Oct. 29 26 Feb. 165.10 165.23 Dec. 164.19 25 165.06 Aug. 27 165.61 Mar.

502. Carl Fritz. Sixty feet north of U. S. Highway 290, 150 feet west of Hays-Travis County line. Water level, in feet below measuring point, 1940: Jan. 24, 124.50.

504. Glynn C. Key. Two hundred feet north of U. S. Highway 290, 2.3 miles west of Hays-Travis County line.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level 39.47 38,04 36.83 May July 29 36.80 Jan. 24 5 Oct. 28 37.72 36.69 36.74 Feb. 28 37.62 28 Aug. 29 Dec. 36.02 27 37.55 June 25 37.60 Sept.23 Mar.

505. Glynn C. Key. Two feet north of well 504.

Water level, in feet below measuring point, 1940 Jan. Oct. 28 24 77.74 May 6 76.47 July 29 66.27 70.54 28 76.16 28 Aug. 29 70.94 65.23 Feb. 76.96 Dec. 27 75.81 June 25 75.31 Sept.23 70.05 Mar.

506. John L. Tinney. One hundred fifty feet north of U. S. Highway 290, 0.7 mile east of Dripping Springs, 6.8 miles west of Hays County line.

Water level, in feet below measuring point, 1940 36.19 Jan. 24 36.47 36.43 July 29 36.17 Oct. 28 6 Aug. 29 Sept.23 Feb. 28 36.42 28 36.19 6 35.78 36.45 Dec. Mar. 27 36.48 June 25 36.42 36.12

507. John L. Tinney. Twenty-one feet east of well 506.

Water level, in feet below measuring point, Jan. 24 66.24 May 6 63.39 July 29 59.42 Oct. 28 64.03 Feb. 28 66.03 Aug. 29 70.55 28 63.27 Dec. 64.40 27 June 25 Mar. 63.16 Sept.23 63.47

524. H. W. Hageman. Ten feet east of water tank, 100 feet north of local road which turns west from old U. S. Highway 81 at point 1.8 miles north of courthouse in San Marcos.

Water level, in feet below measuring point, 1940 July 26 Aug. 26 Jan. 23 34.29 Apr. 27 33,99 36.24 Oct. 29 34.70 Feb. 26 May 24 33.34 36.41 34.54 36.54 Dec. 5 June 27 Mar. 25 34.05 34.23 Sept.27 34.82

528. F. N. Whaley. One-tenth mile west of old U. S. Highway 81, 4.75 miles north of courthouse in San Marcos.

Water level, in feet below measuring point, 1940 98.44 98.31 July 26 Aug. 26 99.07 Apr. 27 98.20 Sept.27 Jan. 23 99.96 98.93 Feb. 26 May 24 98.70 98.90 Oct. 29 Mar. 25 98.20 June 27-98.47

### Hays County -- Continued.

529. Nicholas Thiele. At south edge of Kyle, 15 feet south of street, 25 feet northeast of first house west of railway.

	Water	r level, i	n feet be	low measur	ing point	, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23 Feb. 26 Mar. 25	148.13 148.38 149.96	Apr. 27 May 24 June 27	149.07 150.01 150.03	July 26 Sept.27	148.87 149.40	Oct. 30 Dec. 5	148.47 146.53

532. San Antonio bank. On old U. S. Highway 81, 150 feet east of highway, 5,2 miles north of Kyle. Water levels, in feet below measuring point, 1940; Jan. 29, 168.79; Mar. 25, 167.14; Aug. 29, 164.06; Oct. 30, 166.02.

534. S. B. Barber. In Buda, on west side near north end of Main Street. Equipped with automatic pump since July 26, 1940.

		Water	leve	l, in	feet be	low measuri:	ng point,	1940		
Jan. Feb. Mar.	23 26 25	142.06 142.91 143.67	Apr. May June	29 24 24	138.80 140.35 130.37	July 26 Aug. 26 Sept.27	125.97 134.49 137.84	Dec.	29 5	140.28 124.33

535. Thomas Yoe. One hundred feet east of U. S. Highway 81, 0.2 mile south of Hays-Travis County line. Not used since Apr. 29, 1940.

	Water	r level, in	feet be	low measuri	ng point,	1940	
Jan. 23	27.45	Apr. 29	26,99	July 26	26.24	Oct. 30	26.78
Feb. 26	26.96	May 24	27.01	Aug. 26	26.50	Nov. 30	26.58
Mar. 25	27.58	June 24	26.95	Sept.27	26.66		

543. W. P. Donaldson. Five hundred feet northwest of old U. S. Highway 81, 2.6 miles southwest of San Marcos.

Water	level, in	feet bel	low measuri	ng point,	, 1940	
Jan. 23 77.18 Feb. 27 76.89	Apr. 27 May 24	73.90 76.44		a 5.95 76.43		76.83

553. G. M. Jackson. On old U. S. Highway 81, opposite school house, 300 feet west of road, 2.95 miles southwest of courthouse at San Marcos. Not used since Sept. 28, 1938.

	Water	r level, in	feet be	low measur	ing point	, 1940	
Jan. 23	122.03	Apr. 27	121.84	July 26	121.87	Oct. 29	122.56
Feb. 27	121.84	May 24	122.18	Aug. 27	122.32	Dec. 5	121.01
Mar. 25	121.99	June 27	121.95	Sept.27	122.64		

565. San Antonio bank. On old U.S. Highway 81, 1 mile north of Kyle. Water levels, in feet below measuring point, 1940: Jan. 23, 161.17; May 24, 162.14; Oct. 30, 159.17; Dec. 5, 159.75.

585. R. F. Clayton. On State Highway 80, 100 feet southwest of road intersection, 4.15 miles south of Wimberly.

	Water	r level, in	feet be	low measuri	ng point	, 1940	 
Jan. 24 Feb. 28 Mar. 27	65.18 65.48 65.85	Apr. 30 May 28 June 25	68.11	July 29 Aug. 29 Sept.23	61.73 66.40 64.71	Oct. Dec.	64.36 61.49

586. W. A. Leath. Two hundred fifty feet east of State Highway 80, 1 mile southeast of Wimberly.

	Water	clevel, in	feet be	low measuri	ng point	1940	 
Jan. 24 Mar. 27 Apr. 30	44.43 43.91 42.73	May 28 June 25		July 29 Sept.23	43.05 44.69		42.57 41.70

a Affected by heavy rain.

### Hays County -- Continued.

590. Fred Boyett. One hundred feet south of local road, 3.2 miles west of well 585, 4.15 miles southwest of Wimberly.

	Water	level, in	feet be	low measurin	ng point	, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24 Feb. 28 Mar. 27	69,28 68,79 68,96	Apr. 30 May 28 June 25	70.50 68.15 64.38	Aug. 29 Sept.23_	71.37 68.49	Oct. 28 Dec. 6	70.21 65.20

	591.	Fred Bo	oyett. One	hundred	feet south	of well	590.		
		Water	r level, in	feet be	low measuri	ng point	1940	_	
Jan.	24	56.49	Apr. 30	50.96	July 29	49.88	Oct.	28	55.54
Feb.	28	5 <b>4.6</b> 9	May 28	53.60	Aug. 29	53.26	Dec.	6	42.90
Mar.	27	55.16	June 25	37.72	Sept.23	54.52			

613. A. J. Haley. One hundred fifty feet west of road, 11.4 miles south of Dripping Springs.

	Water le	vel, in feet	below measurin	g point, l	.940
Date	Wate leve		Water level	Date	Water level
Jan. Feb.			174.28 174.24	Aug. 29 0ct. 28	174.61 175.55

614. J. D. McCall. Fifty feet west of road, 6.85 miles south of Dripping Springs. Water level affected by heavy rains.

Water level in feet below measuring point 1940

	Water	r level, i	ln reet be.	Low measuri	ng point,	, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24 Feb. 28 Mar. 27	109.24 24.91 26.06	Apr. 30 May 28 June 25	24.95 26.09 24.49	July 29 Aug. 29 Sept.23	24.81 55.70 69.79	0ct. 28 Dec. 6	88.70 24.06

615. Wiley Roberts. One-tenth mile west of county road, 4.6 miles south of Dripping Springs.

Water	level, in	feet be	low measuri	ng point,	1940	 ·
	Apr. 30 May 28 June 25	85.95 86.02 85.89	July 29 Aug. 29 Sept.23	85.87 85.98 86.05		86.04 85.87

629. J. N. Byler. Forty feet northeast of rock house, 100 feet east of road, 6.45 miles north of Wimberly. Equipped with automatic pump. Water levels, in feet below measuring point, 1940: Jan. 24, 233.28; Feb. 28, 233.7; Sept. 23, 232.15; Oct. 28, 232.48.

677-A. T. E. Hughes. At northwest edge of Wimberly.

	Water	· level,	in feet be	low measuri	ng point	,1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24 Feb. 28 Mar. 27	20.55 23.31 25.80	Apr. 30 May 28 June 25	28.50 29.14 29.64	July 29 Aug. 29 Sept.23	29,94 30,13 30,01	0ct. 28 Dec. 6	30.06 30.12

 $677.\ \ J.\ E.\ \ Bryant.\ \ Six and fifty-five hundredths miles north of Wimberly.$ 

	Water	r level, in	feet be	low measuri	ng point,	1940	
Jan. 24	a102.05	Apr. 30	100.43	July 29	100.70	Oct. 28	101.12
Feb. 28	3 100.08	May 28	100.58	Aug. 29	100.73	Dec. 6	100.91
Mar. 2	7 100.16	June 25	100,75	Sept.23	100.96		

a Pumping slowly.

# Hays County -- Continued.

678. J. E. Bryant. One-tenth mile south of well 677.

	Water	r level, i	in feet be	low measur:	ing point	, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24 Feb. 28 Mar. 27	275.23 275.10 275.13	Apr. 30 May 28 June 25	275.00 275.01 275.02	July 29 Aug. 29 Sept.23	275.01 275.12 275.23	Oct. 28 Dec. 6	275.34 275.38

699. A. A. Elsner. One and six-tenths miles south of Dripping Springs.

	Water level	, in feet	below measu	ring point,	1940	
Feb. 28 133 Mar. 27 133 May 6 133	.36 May .39 June	28 133.4 25 132.6	July 29 3 Aug. 29	121.90 129.85	Sept.23 Oct. 28	131.94 132.56

706. Jim Roberts. Seventy-five feet east of road, 0.9 mile north of Wimberly, 14.4 miles south of Dripping Springs. Water level affected by heavy rains.

	Water	· level, in	feet be	low measuri	ng point	, 1940	 
Jan. 24 Feb. 28 Mar. 27	42.34	Apr. 30 May 28 June 25	57.90	July 29 Aug. 29 Sept.23	45.68 59.12 59.59		62.11 8.21

### Hemphill County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

- 1. Twelve and eight-tenths miles northwest of northern end of Canadian River bridge, thence 0.5 mile southeast by way of rock trail. Water levels, in feet below measuring point, 1940: Apr. 9, 137.15; Aug. 6, 137.58; Dec. 4, 137.26.
- 2. Nine and two-tenths miles northwest of northern end of Canadian River bridge, and 600 feet west of U. S. Highway 83. Water level, in feet below measuring point, 1940: Aug. 6, 44.98.
  - 3. No measurements made in 1940.
- 4. Four hundred feet west of U. S. Highway 83, 2.65 miles south of main street in Canadian. Water level, in feet below measuring point, 1940: Apr. 9, 51.65.
  - 5. No measurements made in 1940.
- 6. Fifteen and eight-tenths miles southwest of main street in Canadian, 30 feet north of U. S. Highway 60. Water levels, in feet below measuring point, 1940: Apr. 9, 14.01; Aug. 6, 15.45. Measurements discontinued.
- 7. Two hundred and fifty feet north of well 6. Water levels, in feet below measuring point, 1940: Apr. 9, 5.67; Aug. 6, 7.20; Dec. 4, 6.44.

## Henderson County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

270. T. M. Mathews. About 300 feet west of U. S. Highway 175, 3.6 miles northwest of courthouse in Athens. Measured flow, in gallons per minute, 1940: Apr. 3, 2.0; July 11, 2.1; Nov. 25, 2.0.

275. D. F. Dean. One hundred fifty feet east of State Highway 19, 1.45 miles north of courthouse in Athens. Water levels, in feet below measuring point, 1940: Apr. 3, 24.73; July 11, 21.18; Nov. 25, 23.07.

279. E. M. Henderson. One hundred feet north of U. S. Highway 175, 1.9 miles southeast of courthouse in Athens. Water levels, in feet below measuring point, 1940: Apr. 3, 17.58; July 11, 18.58; Nov. 25, 14.19.

## Henderson County -- Continued.

- 292. Drane Ice Company. In Athens. Water levels, in feet below measuring point, 1940: Apr. 3, 70.74; July 11, 76.41; Nov. 25, 73.09.
- 316. J. W. Christopher. Five and four-tenths miles east-northeast of Malakoff. Water levels, in feet below measuring point, 1940: Apr. 3, 40.93; July 11, 41.11.
- 323. J. W. Spiller. Six and one-fourth miles west of Athens. Water levels, in feet below measuring point, 1940: Apr. 3, 45.62; July 11, 45.94; Nov. 25, 45.09.
- 623. J. Casey. Three hundred feet south of U. S. Highway 175 in center of Poyner. Water levels, in feet below measuring point, 1940: Apr. 3, 40.45; July 11, 40.29; Nov. 25, 40.47.
- 628. Texas and New Orleans Railroad. In center of Poyner. Water levels, in feet below measuring point, 1940: Apr. 3, 5.29; July 11, 5.21.
- 710. Will Richardson. Four and ninety-five hundredths miles southeast of courthouse in Athens. Water levels, in feet below measuring point, 1940: Apr. 3, 17.62; July 11, 15.39; Nov. 25, 17.07.
- 723. La Rue Public School. In La Rue. Well dry at 24 feet on Apr. 3, July 11, Nov. 25, 1940.
- 724. J. R. Hallmark. About 300 feet north of U. S. Highway 175, 11.9 miles southeast of Athens. Well dry at about 36 feet on Apr. 3, July 11, Nov. 25, 1940.
- 741. La Poyner School. About 300 feet north of U. S. Highway 175, -2.8 miles northwest of Poyner. Water levels, in feet below measuring point, 1940: Apr. 3, 57.25; July 11, 53.60; Nov. 25, 56.33.
- 813. R. P. Tidmore. About 400 feet north of State Highway 31, 1.2 miles east-northeast of Malakoff. Equipped with automatic pump. Water levels, in feet below measuring point, 1940; Apr. 3, 27.63; July 11, 28.20; Nov. 24, 27.65.
- 902. Richard Derden. One and fifteen hundredths miles north-northwest of Malakoff. Water levels, in feet below measuring point, 1940: Apr. 3, 87.98; July 11, 88.23; Nov. 24, 87.82.
- 905-A. Drane Ice Company. Two hundred fifty feet east of State Highway 31, in Malakoff. Water levels, in feet below measuring point, 1940: Apr. 3, 95.93; July 11, 99.55; Nov. 24, 98.33.
- 919. Lone Star Gas and Fuel Company. In company grounds, 1.6 miles southeast of Trinidad. Pumped almost continuously. Water levels, in feet below measuring point, 1940: Apr. 3, 61.44; July 11, 45.63; Nov. 24, 62.26.
- 920. W. M. Bradley. About 400 feet east of Lone Star Gas Company plant. Water levels, in feet below measuring point, 1940: Apr. 3, 16.22; July 11, 15.49; Nov. 24, 15.79.
- 921. Lone Star Gas and Fuel Company. Sixty feet northwest of bridge, 1.8 miles southeast of Trinidad. Pumped almost continuously. Water levels, in feet below measuring point, 1940: Apr. 3, a/92.14; July 11, a/91.52; Nov. 24, a/ 91.84.
- 925. Cotton Gin Company. In Trinidad. Measuring point to July 11, 1940, top of wood curb, 2.3 feet above land surface. Measuring point since July 11, 1940, top of brick-concrete curb, 0.3 foot above land surface. Water levels, in feet below measuring point, 1940: Apr. 3, 31.01; July 11, 31,35; Nov. 24, 29.03.

# Hockley County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
  - 1. Measurements discontinued.
  - 2. Measurements discontinued.
  - 3. Measurements discontinued.
  - a Pumping.

# Hockley County -- Continued.

- Measurements discontinued.
- 5. Santa Fe Railroad Company. In Smyer. Water level, in feet below measuring point, 1940: Mar. 26, 92.68.
  - 6. No measurements made in 1940.
- 7. South line of lab. 23, Wm. Tubbs survey, 5.2 miles east of Levelland. Water level, in feet below measuring point, 1940: Mar. 26, 87.55.
  - 8. Measurements discontinued.
  - 9. Measurements discontinued.
  - 12. Measurements discontinued.
  - 14. Measurements discontinued.
  - 17. Measurements discontinued.
- 18. On south line of lab. 21, 1ge. 67, Hardeman County School Land, 8.0 miles west of railroad depot in Levelland. Water levels, in feet below measuring point, 1940: Mar. 26, 133.40; Dec. 3, 133.44.
- 19. Mrs. W. T. Coble.  $NW_2^1$  lab. 30, lge. 65, Hardeman County School Land, 9.55 miles west of railroad depot in Levelland. Water levels, in feet below measuring point, 1940: Mar. 26, 143.86; Dec. 3, 143.80.
  - 20. Measurements discontinued.
- 21a. 0. E. Lucas.  $SE_{2}^{1}NE_{2}^{1}$  sec. 14, blk. I, 0.9 mile south and 3 miles west of Ropes. Water levels, in feet below measuring point, 1940: Jan. 16, 69.63; July 31, 69.76; Nov. 20, 69.82.
- 22a. Town of Ropes. At east edge of small park, 0.4 mile east of railroad depot in Ropes. Water level, in feet below measuring point, 1940: Nov. 20, 98.81.
- 24. R. Y. Hughen.  $SW_2$  sec. 99, blk. A, R. M. Thomson survey, 2 miles southeast of railroad depot in Anton. Water levels, in feet below measuring point, 1940: Mar. 13, 27.12; Dec. 16, 28.38.
- 25. Texas Highway Department. SW sec. 105, blk. A, R. M. Thomson survey, 0.6 mile east of railroad depot in Anton. Water levels, in feet below measuring point, 1940: Mar. 13, 29.27; Dec. 16, 30.40.
  - 27. Measurements discontinued.
- 28. Dan Jackson and Paul Whitfield. NW cor.  $SW_2^+$  sec. 106, blk. A, R. M. Thomson survey, 0.35 mile west and 0.5 mile south of railroad depot in Anton. Water levels, in feet below measuring point, 1940: Mar. 13, 34.52; Dec. 16, 36.39.
- 29. A. L. Lindsey. SE cor.  $SE_4^1$  sec. 124, blk. A, R. M. Thomson survey, 1.7 miles west of railroad depot in Anton. Water level, in feet below measuring point, 1940: Dec. 16, 31.65.
- 125. E. F. Allen. SEINEISWI sec. 87, blk. A, 1 mile west of railroad water tank in Roundup. Water levels, in feet below measuring point, 1940: Mar. 13, 66.2; Dec. 16, 67.1.
- 126. W. M. Alexander. SE\starting SE\starting SW\frac{1}{2} sec. 89, blk. A, 3 miles south of Anton. Water levels, in feet below measuring point, 1940: Mar. 13, 28.29; Dec. 16, 28.97.
- 127. Leeds. SE\(\frac{1}{2}\)SE\(\frac{1}\)SE\(\frac{1}\)SE\(\frac{1}{2}\)SE\(\frac{1}{2}\)

# Howard County

Well numbers correspond to those in Water-Supply Papers 817, 840, 845 and 886.

51. City of Big Spring. Measurements furnished by  $\boldsymbol{E.}\ \boldsymbol{V.}$  Spence, City Manager.

	Wate	r level, in	feet below	measuring point	, 1940	
Day	Jan.	Feb.	Mar.	Apr.	May	June
1		132.08	133.08	135.50	141.17	144,17
2		131.92	133.42	135.83	141.50	144.25
3		131.75	133.08	136.17	141.75	144.75
4			133.00		141.83	144.67
5		130.83	132.83	137.17	142.42	145.00
6		131.50	133.08	136.33	142.25	145.17
2 3 4 5 6 7 8		131.17	133.42	136.33	142.33	145.67
8			133.25	135.75	142.67	160.42
9			133.33	135.33	142.75	146,67
10		131.42	133.42	135.33	142.42	145,58
11			133.17	136.00	143.17	144,83
12	132.00	130.50	133.42	136.25	143.00	144,42
13	131.67	131.08	133.58	136.17	143.00	144.75
14	131.75	131.08	133.75	136.17	142.92	144.50
15	131.67	131.17	133.83	136.75	143.92	144,58
16	131.50		134.17	137.67	144.50	144.75
17	131.33		134.00	137.83	143.67	144.92
18			133.58	138.08	143.50	145.50
19	131.25	130.42	133.83	138.50	142.92	145.42
20	131.50	131.75	133.75	138.75	142.33	145.42
21	131.92	131.67	134.50	*****	142.58	145.50
22	131.42	132.42	134.92	139.17	142.25	144.75
23	131.25	132.42	135.17	139.25	141.25	144.33
24	131.33	132.42	135.08	139.58	141.42	144.17
25	131.17	132.17	134.17	139.67	141.33	144.58
26	131.25	131.83	133.92	139.92	141.58	
27	131.08	132.17	134.08	140.42	141.83	143.25
28	131.25	132.50	134.50	140.00	142.33	142.00
29	131.00	133.00	134.92	140.33	142.83	143.75
30	131.50		135.50	140.83	143.25	143.58
31	131.67	*****	135.33		143.75	
0.1	191.67	•••••	199.33	•••••	140.75	•••••

	Wate	r level, in f	eet below me	asuring poin	t, 1940	
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	143.25	140.33	134.17	130.75	128,58	127.33
2 3		140.58	134.00	130.58		
3	142.42	139.83	133.83	130,42		127,17
4 5		139.58		130.33	128.42	~
5	141.08	139.25	133.50	130.25		127.00
6	141.92	139.00	133.17	130.17		
6 7 8 9	140.58	138.83	133.17	130.08		126.83
8	140.08	138.33	133.17	130.00	*****	
9	140.08	138.17	133.08	****	128.25	126.67
10	155.08	137.83	132.83	129.83		
īi	142.00	137.83		129.75	*****	126,50
12	142.42	137.42	132.67	129.67		
13		137.33		44444		126.33
14		137.25	132.50	•••••	128.00	
15		137.00	132.50	129.50		
16		136.83		129.42		126.08
17	•••••	136.75	132.50	129.25		
īs	•••••	136.50				
19		136.25	132.25	129.17	127.83	125.83
20	142.50	136.17	132.17			120,00
21	142.33	136.00	132.00	129.08	127.67	• • • • • •
		135.83			127.07	125.58
22	141.17		131.83	700.00		120,00
23	140.92	135.58	131.83	129.00	• • • • •	•••••
24	140.83	135.42	131.75	100.00	107 50	105 33
25	142.00	135.25	_ 131.67	128.92	127.58	125.33

# Howard County -- Continued.

51. City of Big Spring. -- Continued.

Water	level.	in	feet	below	measuring	point.	1940
-------	--------	----	------	-------	-----------	--------	------

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	142.17	135.00	131.50			
27	141.17	134.67	131.42	128.83		
28	141.83	134,42	131.33			125.00
29	141.00	134.33	131.25	128.75	127.42	
30		134.25	131.00	128.67		124.75
31	140.25	134.17				•••••

56. City of Big Spring. Measurements furnished by E. V. Spence, City Manager.

Water level in feet below measuring point, 1940

	Wate	r level, in	feet below	measuring poin	t, 1940	
Day	Jan,	Feb.	Mar.	Apr.	May	June
1		158.25	163.75	165.92	173.17	174.42
2		157.50	163.33	167.00	174.00	174.92
2 3 4 5 6 7		156.75	161.25	168.50	174.17	175.42
4	*****	*****	160.58	172.58	174.33	175.50
5		149.92	160.42	170.42	174.75	176.17
6		155.17	162.67	166.58	172.50	177.00
7	*****	156.17	162.58	164.33	174.75	177.58
8			162.00	162.67	174.58	179.17
8		151.08	162.08	161.75	174.33	179.42
10	*****	156.83	161.17	162.08	173.17	178.67
11	*****	••••	159.75	165.25	173.83	
12	157.00	150.17	161.25	165.50	173.50	
13	155.50	154.00	161.25	164.75	173.00	
14	155.25	156.08	162.08	165.25	173.25	
15	155,00	154.83	162.42	167.58	174.08	
16	155.75	****	164.83	170.42	175.42	
17	154.42		164.25	171.17	174.58	
18			160.17	171.42	174.25	*****
19	154.25	151.25	161.67	171.58	171.17	
20	154.75	158.67	162.08	172.25	169.67	
21	157.67	160.00	164.25	175.17	170.33	*****
22	153.75	161.67	166.42	172.00	168.67	*****
23	154.42	160.58	165.93	172.08	165.75	*****
24	154.92	159.75	164.67	172.33	167.00	
25	155.00	158.67	161.08	172.42	167.50	172.58
26	154.50	157.33	160.00	172.67	169.17	
27	154.83	159.08	161.25	173.17	169.50	167.83
28	155.50	160.50	163.08	171.83	170.33	165.75
29	153.33	162.67	165.92	171.83	172.33	170.50
30	157.67		168.17	172.92	173.17	172.08
31	158.33		165.58		173.58	

	Water	level, in	feet below	measuring poin	nt, 1940	
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	171.08		153.00	148,00	144.42	141.75
2			152.75	147.92	144.33	
3	166.58	• • • • •	152.58	147.83	144.25	141.58
• 4				147.67	144.25	
5	163.50	*****	151.33	147.42	144.17	141.17
6			151,25	147.33	144.08	
7			151.50		144.17	141.08
8			152.25	147.08	143.92	
9			151.58	• • • • • • •	143.83	140.75
10			150.83	146.83	143.75	
11				146.75	143.67	140.58
12			150.75	146.67	143.58	
13					143.50	140.42
14			150.25		143.42	
15	•••••		150.17	146.33	143.25	
16				146.25	143.17	140.25

### Howard-County--Continued.

56.	City of Big Spr	ingContinue	d.	
	Water level,	in feet below	measuring point,	1940

Day	Jul <del>y</del>	Aug.	Sept.	Oct.	Nov.	Dec.
17			149.83	145.92	143.00	140.08
18					142.83	
19			149.67	145.33	142.67	139.92
20		156.08	149.58		142.58	
21		155.17	149.42	145.08		139.75
22		154.50	149.25			
23		154.42	149.08	144.75	142.42	139.58
24		154.17	149.00			
25		153.92	148.83	144.67	142.33	139.42
26		153.50	148.75			
27		153.67	148.67	144.67	152.08	139.25
28		153.42	148,50			
29		153.08	148.42	144.58	141.92	
30		153.00	148.25	144.50		139.00
31	*****	153.17			*****	

65. City of Big Spring. Measurements furnished by E. V. Spence, City Manager.

		Water	· level	, in	feet be	row wea	asur.	ing point,	1940		
Date		Water level	Date		Water level	Date		Water level	Date		Water level
	11 12 13 14	171.92 171.92 173.25 172.33		15 16 17 18	172.67 172.67 172.92 174.17	June	19 20 21	173.50 173.33 173.58	June	22 23 24	172.67 172.33 172.67

606. Mrs. Cora Eley.  $SE_4^1SE_4^1$  sec. 5, blk. 33, T. 1 S., 4.5 miles southwest of Big Spring. Water levels, in feet below measuring point, 1940: Jan. 17, 111.50; Aug. 1, 112.25; Nov. 24, 112.36.

846. Earl Phillips. NW\(\frac{1}{2}\)\(\text{sec. 6, blk. 32, T. 1 N., 6.5 miles north of Big Spring. Water levels, in feet below measuring point, 1940: Mar. 1, 44.42; Nov. 25, 44.22.

853. No measurements made in 1940.

859. No measurements made in 1940.

861. Delia S. Wright.  $SE_4^1SE_4^1$  sec. 44, blk. 33, T. 3 N., 15.75 miles northwest of Big Spring. Water level, in feet below measuring point, 1940: Aug. 2, 45.39. Measurements discontinued.

876a. Twelve and one-half miles northwest of Big Spring on U. S. Highway 87, thence 2.5 miles west on county road. Water levels, in feet below measuring point, 1940: Mar. 1, 16.76; Aug. 2, 17.72. Measurements discontinued.

879. J. H. Hanks. SW1SW1 sec. 39, blk. 33, T. 2 N., 7.75 miles north of Big Spring on U. S. Highway 87, thence 2.5 miles west on county road. Water levels, in feet below measuring point, 1940: Mar. 1, 22.38; Aug. 2, 22.29; Nov. 25, 24.15.

893b. R. L. Schwerzenbach.  $NW_2^4$  sec. 30, blk. 32, T. 1 N., 3.5 miles north of Big Spring. Water levels, in feet below measuring point, 1940: Mar. 1, 68.95; Aug. 2, 70.47; Nov. 25, 71.55.

898. R. B. Cline.  $SE_2^{\dagger}SE_2^{\dagger}$  sec. 46, blk. 33, T. 1 N., 2 miles west of U. S. Highway 87 at Fairview. Water levels, in feet below measuring point, 1940: Mar. 1, 68.68; Aug. 2, 67.13.

899. J. W. Smith. NELNEL sec. 44, blk. 33, T. 2 N., 5 miles west of U. S. Highway 87 at Fairview. Water levels, in feet below measuring point, 1940: Mar. 1, 23.39; Aug. 2, 28.35; Nov. 25, 23.72.

915. No measurements made in 1940.

942. Burton Lingo Lumber Company. At west edge of Big Spring, 0.1 mile south of U. S. Highway 80. Water levels, in feet below measuring point, 1940: Jan. 17, 53.32; Aug. 1, 53.28; Nov. 24, 53.81.

## Jackson County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 5. Jackson County. Thirty feet east of Upper Cordele School, 5.7 miles north of Cordele. Water levels, in feet below measuring point, 1940: Mar. 8, 35.33; Dec. 10, 35.43.
- 6. N. J. Marthiljohni. Windmill in pasture, without buildings, 50 feet west of county road, 1 mile south of Morales. Water levels, in feet below measuring point, 1940: Mar. 8, 36.46; Dec. 10, 34.18.
- 7. D. W. Schropshire. Fifty feet west of county road, 1.25 miles north of Navidad. Equipped with hand pump since Dec. 15, 1939. Water levels, in feet below measuring point, 1940: Mar. 8, 46.26; Dec. 10, 44.62.
- ll-A. Nellie Miller Estate. Thirty feet northeast of old well 11, 0.1 mile southwest of county road, about 5 miles south of Morales. Water levels, in feet below measuring point, 1940: Mar. 8, 36.22; Dec. 10, 35.66.
- 12. J. L. Shepherd. Three and three-fourths miles southeast of Morales. Water levels, in feet below measuring point, 1940: Mar. 8, 38.59; Dec. 10, 38.54.
- 14. Mrs. C. V. Watson. West side of road, 2.3 miles north of Cordele. Water levels, in feet below measuring point, 1940: Mar. 8, 36.03; Dec. 10, 36.19.
- 56. A. H. Nagel. Fifty feet east of store at Cordele. Water levels, in feet below measuring point, 1940: Mar. 8, 33.38; Dec. 10, 33.62.
- 57. S. G. Drushel. At northwest corner of crossroads, 2.55 miles south of Cordele. Water levels, in feet below measuring point, 1940: Mar. 8, 38.40; Dec. 10, 38.53.
- 64. Wm. Clifford. Three and one-half miles west of Edna. Water levels, in feet below measuring point, 1940: Mar. 8, 33.50; Dec. 10, 33.62.
- 66. S. J. and E. F. Swenson. Two hundred feet west of road, 0.6 mile south of Navidad River, 5 miles northeast of Edna. Water levels, in feet below measuring point, 1940: Mar. 8, 38.78; Dec. 10, 37.76.
- 69. A. E. Westhoff. Three hundred feet south of Cordele road, 2.5 miles northeast of Edna. Water levels, in feet below measuring point, 1940: Mar. 8, 36.23; Dec. 10, 35.98.
- 71. W. Rogers. Six-tenths mile west of Lavaca River bridge, 3.7 miles west of Edna. Water levels, in feet below measuring point, 1940: Mar. 8, 24.64; Dec. 10, 25.78.
- 76. Southern Pacific Railway Company. At southwest corner of Jackson County Courthouse square in Edna. Water levels, in feet below measuring point, 1940: Mar. 8, 28.88; Dec. 10, 29.15.
- 78. Rose, Sample, Taylor and Bagby. North side of road, 2 miles east of Edna, opposite Mansion railroad station. Water levels, in feet below measuring point, 1940: Mar. 8, 32.06; Dec. 10, 32.31.
  - 86. Measurements discontinued.
- 103. A. C. Wilbeck. Six and one-tenth miles northwest of Ganado. Water levels, in feet below measuring point, 1940: Mar. 8, 39.11; Dec. 10, 38.28.
  - 106. Measurements discontinued.
- 108-A. Sugarland Fig Growers Association. Ten feet east of well 108, in Ganado. Water levels, in feet below measuring point, 1940: Mar. 11, 28.42; Dec. 9, 28.36.
- 115. R. W. Silliman. Thirty feet southeast of road intersection, 5.3 miles southeast of Ganado. Water levels, in feet below measuring point, 1940: Mar. 11, 27.11; Dec. 9, 27.55.
- 123. Mrs. C. L. Gaines. One and two-tenths miles north of State Highway 111, 9 miles southeast of Ganado. Water levels, in feet below measuring point, 1940: Mar. 11, 28.49; Dec. 9, 28.56.

### Jackson County -- Continued.

- 154. No measurements made in 1940; well flowing.
- 155. Measurements discontinued.
- 156. Bennie Elliott. Two-tenths mile west of Matagorda County line, 0.4 mile south of State Highway 35. Water levels, in feet above measuring point, 1940: Mar. 11, 5.75; Dec. 11, 3.85.
- 180. L. Ward. On east side of road, at La Ward. Water levels, in feet below measuring point, 1940: Mar. 11, 22.99; Dec. 11, 23.84.
- 228. W. A. Utzman. One hundred feet west of well 229. Water levels, in feet below measuring point, 1940: Mar. 8, 8.87; Dec. 10, 9.00.
- 229. W. A. Utzman. Eight-tenths mile south of Casa Blanca School, 2.9 miles north of Vanderbilt. Water levels, in feet below measuring point, 1940: Mar. 8, 34.40; Dec. 10, 33.30.
- 230. Royal Dedman. Fifty feet south of road, 5.5 miles northeast of Vanderbilt. Water level, in feet below measuring point, 1940: Mar. 8, 37.49.

#### Jim Wells County

- Well numbers correspond to those in Water-Supply Papers 777, 840, 845, and 886.
- 193. M. Morales. Eight and one-half miles west-northwest of Ben Bolt. Water level, in feet below measuring point, 1940: Feb. 17, 28.06.
- 201. Santos Garcia. Eight and one-half miles west-southwest of Ben Bolt. Water level, in feet below measuring point, 1940: Feb. 17, 32.51.
- 206. Emilio Barrera. Six and one-half miles west of El Par. Water level, in feet below measuring point, 1940: Feb. 17, 57.18.
- 207. Roman Saenz. Six miles west of El Par. Water level, in feet below measuring point, 1940: Feb. 17,  $\underline{a}/71.53$ .
- 221. Felix Perez Cadena. Six miles west-northwest of Wadoto. Water level, in feet below measuring point, 1940: Feb. 17, 52.76.
- 222. Manuel Cadena. Six miles west-northwest of Wadoto. Water level, in feet below measuring point, 1940: Feb. 17, 52.52.
- 252. Cerapio Hinojosa. Six and one-half miles west-southwest of Ella. Water level, in feet below measuring point, 1940: Feb. 17, 54.49.
- 253. San Juan Hinojosa. Six and one-half miles west-southwest of Ella. Water level, in feet below measuring point, 1940: Feb. 17,  $\underline{a}/65.60$ .
- 374. E. G. Maun. Four and one-half miles northwest of Falfurrias. Water level, in feet below measuring point, 1940; Feb. 18, 13.79.
- 391. O. A. Fore. Two and one-half miles north of Falfurrias. Water level, in feet below measuring point, 1940: Feb. 17, 25.83.

# Kinney County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

XK-1. Well 210 b/. Ethel Whitaker. Three-tenths mile west of Kinney County line, 2.1 miles west of Cline on U. S. Highway 90.

Water level, in feet below measuring point, 1939-40 Water Water Water Date Date Date level level level Dec. 2, 1939 Jan. 15, 1940 Dec. 67.23 Apr. 24, 1940 67.04 Aug. 22, 1940 64.80 Sept.25 66,15 May 21 June 19 66.55 66.54 Feb. 23 66.23 66.01 Oct. 23 68.43 Mar. 19 66.71 July 24 65.06 Dec. 68.03

a Pumping
b Kinney County, Texas, Records of wells, etc., Texas State Board
of Water Engineers. (Mimeographed). 1940.

# Kinney County--Continued.

XK-5. Well 177 a/. Judge John Fritter. Four hundred seventy feet south of U. S. Highway 90, 5.45 miles east of Brackettville city limits.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 6, 1939	26.36	Apr. 25, 1940	29.09	Aug. 22, 1940	21.79
Jan. 15, 1940	28.69	May 21	23.83	Sept.25	24.76
Feb. 23	30.27	June 19	22.25	Oct. 23	27.08
Mar. 19	31.10	July 24	21.44	Dec. 4	27.54

XK-6. Well 165  $\underline{a}$ /. Dr. B. F. Orr. Three-tenths mile south of U. S. Highway 90, 2.8 miles east of Brackettville city limits.

	Water	level,	in feet be	low mea	suring po	int, 1939-	40
Dec. 5.	1939	35,36	Apr. 24.	1940	37.23	Aug. 22.	1940 32.50
Jan. 15.	1940		May 21			Sept.20	33.37
Feb. 23		36.60	June 18		34.75	Oct. 23	34.50
Mar. 19		36.94	July 23		31.31	Dec. 4	35.25

XK-9. Well 128 a/. C. J. Poehler. Fifty feet west of north-south road, 1.75 miles west and 0.9 mile south from intersection of Brackettville loop and U. S. Highway 90.

Water level, in feet below measuring point, Water Water Water Water Date Date Date Date level level level level 37.87 Apr. 24 38.94 38.89 38.22 Jan. 15 July 23 Oct. 22 Feb. 23 37.55 May 21 39.54 Aug. 21 38.03 39.34 Dec. Mar. 19 38.06 39.22 37.69 June 18 Sept.19

XK-11. Well lll  $\underline{a}$ /. J. F. Beidler. Forty feet southwest of old house on south side of Highway 90, 6.1 miles west of intersection of Highway 90 and loop road to Brackettville.

	Wat	er level,	in feet	below measu	ring poin	nt, 1940	
Feb. 22 Mar. 19 Apr. 24	28.26	May 21 June 18 July 23		Aug. 21 Sept.19		Oct. 22 Dec. 3	29.24 28.94

XK-12. Well 101  $\underline{a}$ /. J. F. Beidler. Two-tenths mile south of U. S. Highway 90 on top of hill, 11.5 miles west of intersection of Brackettville loop and U. S. Highway 90.

		Water	level, in	feet be	low measuri	ng point,	1940	
Jan.			Apr. 24		July 23	24.60		
Feb.			May 21		Aug. 21	23.97		3 21.62
Mar.	19	26.83	June 18	23.71	Sept.19	23.15		

XK-13. Well 90 a/. Mac L. Weathersby. Nine-tenths mile north of U. S. Highway 90, 16.35 miles west of Brackettville loop road intersection with U. S. Highway 90. Measuring point lowered 0.24 foot on Jan. 4, 1940. Measurements corrected to original measuring point.

	Water	· level, in	feet be	low measuri	ng point	, 1940	
Jan. 4 Feb. 23		Apr. 24 May 21		June 18		Aug. 21	
Mar. 19	57.98	May 21	90.AT	July 23	99.09	Dec. 3	01.99

a Kinney County, Texas, Records of wells, etc., Texas State Board of Water Engineers. (Mimeographed). 1940.

## Kinney County -- Continued.

XK-17. Well 137 a/. Jimmy Lowrance. About 300 yards east of intersection of Brackettville loop and U. S. Highway 90 at west edge of town. Unused drilled domestic well, diameter 8 inches, depth 600 feet. Measuring point, top of water-pipe clamp set on concrete block, 0.4 foot above land surface.

Water level, in feet below measuring point, 1937-1940 Water Water Water Date Date Date level level level 19, Apr. 24, 52.24 July 15, 1937 1939 50.76 1940 12, 26, 1938 50.79 50.27 May 21 June 18 1939 50.78 50.75

Nov. 50.70 Aug. 12 Sept.13 Oct. 49.77 49.92 Jan. Mar. 47.32 50.39 July 23 52.54 Oct. 24 Apr. May 50.94 2 50,52 Aug. 21 50,67 Dec. 9, 51.03 Jan. 50.56 50.93 1940 Sept.19 7 Feb. 23 50.98 June 51.04 50.45 Oct. 22 July 7 51.09 Mar. 19 50.86 Dec. 50.95 50.80

XK-112. Well 54  $\underline{a}$ /. E. Webb. On hilltop, 100 yards west of Silver Lake road, 0.6 mile north of Elm Creek, 7.65 miles, by road, north of Brackettville post office.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date leve1 level level level 197.14 190.74 191.29 Jan. 10 189.49 Apr. 25 June 19 191.58 Sept. 196.38 Feb. 22 195.88 19**5.93** 22 July 24 185.04 Oct. 198.74 May 23 23 June 18 Aug. 21 191.15 3 200.82 Dec. 19 197.85 Mar.

XK-114. Well 62 a/. E. Webb. About 200 yards southwest of ranch house west of Rock Springs-Brackettville road, 5.85 miles, by road, north of Brackettville post office, about 0.5 mile east of Pinto Creek.

Water level, in feet below measuring point, 68.11 Jan. 65.97 Mar. 20 June 19 66.53 Oct. 22 68.49 Sept.19 67.63 Feb. 22 67.39 Apr. 24 67.61 69.32 Dec. 23 22 67.42 May 67.40

XK-116. Well 63 a/. J. D. Harwood. About 200 feet west of Rock Springs-Brackettville road, 8.65 miles by road north of Brackettvill post office.

Water level, in feet below measuring point, 1940 Jan. 9 134.90 Mar. 20 137.85 22 135.40 Sept.19 135,.80 May 22 July 24 Feb. 22 136.79 Apr. 25 135.96 121.28 Oct. 23 137.52 May Aug. 21 Dec. 23 136.79 21 135.64 132,20 138.58

XK-163. Well 78  $\underline{a}$ /. Edward Mey. Nine-tenths mile east of Carta Valley Road, 7.60 miles by road north of junction of Carta Valley Road and U. S. Highway 90, 12.8 miles west of Brackettville post office.

Water level, in feet below measuring point, Aug. 21 Sept.19 Jan. 11 72.72 May 21 74.15 73.40 Oct. 22 74.64 73.91 73.82 Mar. 19 74.96 June 18 73.98 Dec. 24 74.18 July 23 73.54 Apr.

XK-170. Well 46 a/. Nolan & Postell. One and nine-tenths miles north of Laguna-Brackettville road junction with Tularosa road, 11.75 miles, by road, northeast of Brackettville post office, 0.2 mile west of road. Used drilled stock well, diameter 6 inches, depth 342 feet. Measuring point, top of iron water-pipe clamp, 0.65 foot above land surface. Equipped with windmill.

Water level, in feet below measuring point 1940 193.46 192.76 July 24 Aug. 21 Oct. Jan. 27 191.35 Mar. 20 192.25 189.83 22 Feb. 22 Apr. 25 191.06 192.25 191.36 Dec. May 23 191.06 22 190.73

a Kinney County, Texas, Records of engineers. (Mimeographed). 1940. Texas, Records of wells, etc., Texas State Board of Water engineers.

171

# Kinney County--Continued.

XK-180. Well 41 a/. N. P. Petersen. One mile south of Laguna-Brackettville road, 9.95 miles by road northeast of Brackettville post office.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date' level level leve! level Apr. 25 Sept.19 178.36 Feb. 176.98 176.63 176.17 22 June 19 Aug. 21 23 176.22 May 22 176.11 176.44 Oct. 22 176.48 176.50 Mar. 20

XK-187. Well 182 a/. Mrs. G. A. Harrison. Fifty feet north of U. S. Highway 90, 9.3 miles east of Brackettville post office. Used drilled stock well, diameter 6-5/8 inches, depth 514 feet. Measuring point, top of iron water-pipe clamp, 0.8 foot above land surface. Equipped with windmill.

Water level, in feet above measuring point, 1938-40 Water Water Water Date Date Date level level level Oct. 13, 72.67 1938 71.11 July 15, 1939 Apr. 25, 1940 73.38 9, 26 Aug. 12 Jan. 1939 71.00 72.54 May 21 73.49 71.44 72.70 June 19 73.92 Sept.12 1 71.25 Oct. 24 72.65 July 24 74.96 Mar. Apr. 71.45 Dec. 2 72.97 Aug. 22 74.01 9, 74.19 May 71.75 1940 72,90 Sept.25 Jan. Oct. 25 74.36 7 72.00 10 72.88 June July 7 72.40 23 72.84 Dec. 74.69 Feb. 14 72.70 Mar. 73.14 19

XK-196. Well 171 a/. Judge John Fritter. Seven-tenths mile south of Laguna-Brackettville road, 5.2 miles, by road, northeast of Brackettville post office.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Feb. 23 115.13 117.74 115.47 Jan. 10 113.06 Aug. 21 Dec. Feb. 22 116.05 Apr. 24 120.12 0ct. 22 113.00

XK-198. Well 120 a/. Charley Zinsmeister. Two hundred feet southeast of ranch house, 15 feet southwest of nearest windmill, 0.3 mile south of bump gate at U. S. Highway 90, 3.45 miles west of intersection of U. S. Highway 90 and Bracketville loop road at west edge of town. Used dug irrigation well, diameter 48 inches, depth 47 feet. Measuring point, top of concrete curb, 0.6 foot above land surface. Equipped with centrifugal pump.

Water level, in feet below measuring point, 1938-40 Water Water Watar Date Date Date level level level Nov. 29, 8, 21, 1938 39.34 Nov. 1939 41.85 May 1940 45.08 Jan. 26, Dec. 1939 42.77 5 41.35 June 18 45**.6**8 Jan. 15, 1 45.29 1940 40.58 Aug. 21 40.54 Apr. Sept.19 June 7 45.91 Feb. 23 42.08 41.79 Mar. July 7 19 Oct. 22 46.92 45.17 44.50 Aug. 14 45.22 Apr. 24 45.09 Dec. 45.57 Sept.13 43.17

a Kinney County, Texas, Records of wells, etc., Texas State Board of Water Engineers. (Mimeographed). 1940.

# Kinney County -- Continued.

XK-199. Well 152 a/. E. Webb. One mile north of Brackettville post office. Umused drilled irrigation well, diameter 8 inches, depth about 500 feet. Measuring point, top of casing, 1.8 feet below land surface. Water level recorder maintained on well since Feb. 1, 1939.

Daily noon water level, in feet below measuring point, 1939 (from recorder charts)

					0001 4	71 0.14.					
Day Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.
1		41.10	40.82	40.82	40.86	41.04	38.96	37.14	38.32	38.29	38.35
2	40.56	41.08	40.82	40.87	40.87	41.04	38.82	37.17	38.35	<b>38.2</b> 8	38.35
3	40.60	41.03	40.83	40.86	40.87	41.05	38.75	37.22	38.40	38.28	38.37
4		41.06									
5		41.06									
6		41.12									
7		41.15									
8	40.58										
9		41.17									
10540,61		41.13									
11		41.10									
13		41.10									
14	40.72									38.24	
15		41.09									
	40.86										
18		41.01									
19		41.00									
	40.89					39.91					38.90
21											
22		40.89									
23											
25		40.90									
26 640,37											
27											
	• • • • •									38.35	
30		40.87									
31		40.82		40.86		39,05	37.13		38.30		39.14

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

					TTOM.	CCOLUC	or Oria.	. 06/				
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.16	39.71	40.02	40.25	39.29			36.11	37.71	38.88	39.78	• • • • •
2	39.18	39.74	40.03	40.25	39.30			36.16	37.75	38.91	39.82	
3	39.20	39.74	40.03	40.23	39.33		36.20	36.22	37.79	38.94	39.84	<b>b40.18</b>
											39.85	
											39.86	
											39.87	
											39.83	
											39.87	
											39.88	
10	39,36	39.84	40.08	39,60	39.05		34.98	36.68	38.07	39.15	39,89	40.26
											39.93	
											39.92	
											39.96	
14	<b>39.4</b> 0	39.87	40.13	39.38	38.38		35.04	36.94	38.33	39.24	39.97	40.27
											39.98	
											40.00	
											40.02	
											40.05	
											40.06	
											40.07	
											40.06	
22	39.54	39.93	40.17	39.29	37.33	36.91	35.46	37.27	38.62	39.47	40.08	40.29

a Kinney County, Texas, Records of wells, etc., Texas State Board of Water Engineers. (Mimeographed). 1940.
b Tape measurement.

### Kinney County -- Continued.

XK-199 .-- Continued.

Daily noon water level, in feet below measuring point, 1940 (from recorder charts)

Day Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23 39.50	39.93	40.18	39.33		36.97	35.50	37.32	38.66	39.53		40.29
24 39.6	39.95	40.21	39.34		37.05	35.57	37.36	38,68	39.57		40.29
25 39.6	39.96	40.21	39.32		37,11	35.62	37.42	38.73	59.58		40.29
26 39.6	39.96	40.20	39.34		37.17	35,68	37.45	38.74	39.62		40.34
27 39.6	1 39.97	40.20	39.32		37.25	35.75	37.48	38.77	39.66		40.34
28 39.6	5 40.00	40.20	39.30		37,28	35.82	37.53	38.80	<b>39.6</b> 8		40.33
29 39.6	5 40.01	40.20	39.29			35.90	37.58	38,84	39.71		40.35
30 39.6	7	40.21	39.28			35.95	37.65	38.87	39.74		40.35
31 39.7	•••••	40.22				36.02	37,68	3	39.76	• • • • •	40.35

XK-269. Well 53 d/. E. Webb. Six and six-tenths miles, by road, northeast of Brackettville post office. Used drilled stock well, diameter 6 inches. Measuring point, top of iron water-pipe clamp, 1.0 foot above land surface. Equipped with windmill.

	Water	r level, i	in feet be.	low measur:	ing point	, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10 Feb. 23 Mar. 20	147.77 157.78 162.49	Apr. 25 May 22 June 19	161.76 161.50 149.81	July 24 Sept.18 Oct. 22	134.35 136.15 151.71	Oct. 23 Dec. 3	142.89 144.39

#### Kleberg County

- Well numbers correspond to those in Water-Supply Papers 773-D, 845 and 886.
- 13. Tamales a/. King Estate. Eight miles northwest of Santa Gertrudis ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 50.65.
- 15. Pureta a/. King Estate. Five miles northwest of Santa Gertrudis ranch headquarters. Water level, in feet below measuring point, 1940: Peb. 15, 44.45.
- 23. Caldero a/. King Estate. Two and one-fourth miles west-southwest of Santa Gertrudis ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 51.48.
- 31. Liberty a/. King Estate. Two miles south of Santa Gertrudis ranch headquarters. Water level, in feet below measuring point, 1940; Feb. 15, 35.00.
- 35. Silo  $\underline{a}$ /. King Estate. One and one-half miles southeast of Santa Gertrudis ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, b/40.00.
- 64. Rincon Caesar a/. King Estate. Eighteen miles south-southeast of Santa Gertrudis ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 16, c/3.43.
- 73. Joe Stelzig. Two miles north-northeast of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 37.21.
- 79. W. H. Young. One and one-fourth mile north of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 49.36.
- 83. Texas College of Arts and Industries. One and one-fourth miles northwest of Kingsville. Not used since Oct. 1938. Water level, in feet below measuring point, 1940: Feb. 16, 46.34.
- 127. R. F. Preait. Two and one-half miles south of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 28.90.
  - a Owner's name for well.
  - b Pumping.
- c Pumping slowly.
  d Kinney County, Texas, Records of wells, etc., Texas State Board of Water Engineers. (Mimeographed). 1940.

## Kleberg County

- 128. Measurements discontinued.
- Joe Stelzig. Three miles southeast of Kingsville. level, in feet below measuring point, 1940: Feb. 16, 29.98.
- 150. A. Robinson. Four miles southeast of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 12.44.
- 179. N. E. Selstad. Five miles southeast of Kingsville. Water level, in feet below measuring point, 1940: Feb. 17, 17.42.
- 188. J. R. Trussell. Three and one-half miles south of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 24.89.
- 190. L. E. Flato el al. Four and one-half miles south of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 19.99.
- 217. J. R. Trussell. Six miles south of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 17.78.
- 219. A. J. Williams. Six and one-half miles south of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16,  $\underline{a}/14.64$ .
- 257. Mrs. J. Talty. Seven and one-half miles south of Kingsville. Water level, in feet below measuring point, 1940: Feb. 16, 13.83.
- 282. Pete Christensen. Three miles north of Rivera. Water level, in feet below measuring point, 1940: Feb. 16, b/23.8.
- 283. W. H. Bensman. Three miles north of Rivera. Water level, in feet below measuring point, 1940: Feb. 16, 6.94.
- 375. Noria Hondo number 1 c/. King Estate. Twelve miles west of Laureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, a/9.46.
- 380. Telephone number 1  $\underline{c}$ /. King Estate. Thirteen miles southwest of Leureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 16.60.
  - 381. Measurements discontinued.
- 382. Tres Esquinas c/. King Estate. Ten miles west-southwest of Laureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 5.03.
- 383. Quantitos c/. King Estate. Eight and one-half miles westsouthwest of Laureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 5.27.
- 384. Aljibres c/. King Estate. Seven miles west of Laureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15,
- 385. Palacios c/. King Estate. Eight miles west of Laureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 5.82.
- 406. Mujeres Chiquito c/. King Estate. One-half mile south of Laureles ranch headquarters. Water level, in feet below measuring point, 1940: Feb. 15, 25.09.

# Lamb County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 1. H. H. Engleking. Eleven miles west and 4.5 miles north of Earth. Water levels, in feet below measuring point, 1940: Mar. 18, 70.55; Nov. 14, 71.45.
- 3A. J. O. Crawford. Eleven miles west and 3 miles north of Earth. Water level, in feet below measuring point, 1940: Nov. 14, 32.55.
- 6. Albert Lavigne. Twelve miles west of Earth. Water levels, in feet below measuring point, 1940: Mar. 18, 2.95; Nov. 14, 4.21.
  - a Pumping slowly. b Pumping.

  - c Owner's name for well.

### Lamb County -- Continued.

- 7. Lillie Bickle. Eleven miles west and 1 mile north of Barth. Water levels, in feet below measuring point, 1940: Oct. 28, 17.34; Nov. 13, 17.28.
- 8. J. L. Withrow. One-half mile north of U. S. Highway 70, 0.5 mile east of Bailey-Lamb County line. Water level, in feet below measuring point, 1940: Nov. 13, 17.43.
- 13. John Fyie. Ten miles west and 1.5 miles north of Earth. Water levels, in feet below measuring point, 1940; Mar. 18, 20.10; Nov. 13, 21.09.
- 16. R. L. Brown. Ten miles west and 3 miles north of Earth. Water levels, in feet below measuring point, 1940: Mar. 18, 36.31; Nov. 13, 37.48.
- 19. Josephine Roubineck. Ten and one-half miles west and 2 miles north of Earth. Water levels, in feet below measuring point, 1940: Mar. 18, 2:12; Nov. 13, 2:87.
- 30. J. M. Young. Seven miles west and 2 miles north of Earth. Water levels, in feet below measuring point, 1940: Mar. 18, 23.71; Nov. 13, 23.99.
- 33A. Halsell Cattle Company. One and three-tenths miles south of U. S. Highway 70, on east side of Sudan road. Water levels, in feet below measuring point, 1940: Mar. 25, 23.88; Apr. 22, 23.86; Nov. 18, 24.56.
- 34A. Halsell Cattle Company. Three-tenths mile south of U. S. Highway 70, on east side of Sudan road. Water levels, in feet below measuring point, 1940: Mar. 25, 11.42; Apr. 22, 11.38; Nov. 18, 12.20.
  - 38. No measurements made in 1940.
- 42. Halsell Cattle Company. Four and one-half miles west of Earth. Water levels, in feet below measuring point, 1940: Mar. 25, 19.14; Nov. 13, 20.18.
  - 48. Measurements discontinued.
- 60. S. A. Davis. One-half mile northwest of Springlake. Water level, in feet below measuring point, 1940: Nov. 13, 72.88.
  - 76. No measurements made in 1940.
- 76A. George Brown. Ten miles east of Earth. Water levels, in feet below measuring point, 1940: Apr. 22, 83.51; Nov. 13, 82.56.
- 88. Halsell Cattle Company. Eight and one-half miles south of Earth. Water levels, in feet below measuring point, 1940: Mar. 25, 38.08; Dec. 2, 38.68.
- 88A. Halsell Cattle Company. Nine miles south of Earth. Water level, in feet below measuring point, 1940: Dec. 2, 8.68.
- 89A. Halsell Cattle Company. Six and one-half miles south of Earth. Water levels, in feet below measuring point, 1940: Mar. 25, 29.88; Dec. 2, 30.73.
- 90A. County. Five miles south of Earth. Water level, in feet below measuring point, 1940: Mar. 25, 35.46; measurements discontinued.
- 91A. Halsell Cattle Company. Two and one-fourth miles south of Earth. Water level, in feet below measuring point, 1940: Mar. 25, 12.20.
- . 98A. Halsell Cattle Company. Eight miles southwest of Earth. Water levels, in feet below measuring point, 1940: Mar. 25, 37.98; Apr. 22, 37.78; Nov. 18, 38.85.
- 108. Texas Highway Department. Four and seven-tenths miles northwest of Sudan. Water levels, in feet below measuring point, 1940: Mar. 25, 79.11; Nov. 18, 79.18.
  - 110. Measurements discontinued.

## Lamb County -- Continued.

- 216A. Measurements discontinued.
- 230. Two miles northwest of Amherst. Water level, in feet below measuring point, 1940: Nov. 18, 85.82.
- 231. Vincent Peterman. Two miles southeast of Bailey-Lamb County line on U. S. Highway 84. Water levels, in feet below measuring point, 1940: Mar. 25, 97.37; Nov. 18, 97.60.
- 236. L. D. Criswell. Two miles east of Amherst. Water level, in feet below measuring point, 1940: Nov. 18, 80.44.
- 238A. D. C. Black. Four and one-half miles north of Amherst. Water levels, in feet below measuring point, 1940: Mar. 25, 55.37; Dec. 2, 56.01.
- 243. Les Baker. One and one-half miles northwest of Littlefield. Water level, in feet below measuring point, 1940: Dec. 9, 78.72.
  - 247. Measurements discontinued.
- 251A. G. Y. Oxford. Eight and one-half miles north of Littlefield. Water levels, in feet below measuring point, 1940: Mar. 25, 69.56; Dec. 9, 69.61.
  - 259A. Measurements discontinued.
- 259B. Lee Bennett. Six miles north of Littlefield. Water levels, in feet below measuring point, 1940: Mar. 25, 76.70; Dec. 9, 76.89.
- 322. Yellow House Land Company. Four and one-half miles southeast of Littlefield. Water level, in feet below measuring point, 1940: Dec. 16, 42.10.
- 341A. One-half mile north of Yellow House railroad switch. Water level, in feet below measuring point, 1940: Dec. 16, 44.59.
- 342A. R. M. Love. Four and three-tenths miles northwest of Anton. Water level, in feet below measuring point, 1940: Dec. 16, 41.18.

# Lee County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
  - 101-A. Measurements discontinued.
- 113. City of Giddings. In red brick pump house, 0.45 mile northwest of junction of U. S. Highways 77 and 290 in Giddings. Water levels, in feet below measuring point: Dec. 5, 1939, a/216.40; July 9, 1940, 175.58; Nov. 21, 1940, 198.35.
- 113-A. City of Giddings. Near well 113 in Giddings. Not used since 1939. Water levels, in feet below measuring point, 1940: July 9, 137.48; Nov. 21, 137.25.
- 113-B. City of Giddings. Near well 113 in Giddings. Water level, in feet below measuring point, 1940: Apr. 1, 171.89.
- 122. H. B. Krenik. On east side of U. S. Highway 77, 7.85 miles northwest of Giddings. Water levels, in feet below measuring point, 1940: Apr. 1, 37.89; July 9, 37.85; Nov. 21, 37.74.
- 124. Garrett Killian. About 500 feet west of U. S. Highway 77, 5.65 miles north of Giddings. Water levels, in feet below measuring point, 1940: Apr. 1, 58.70; July 9, 51.55; Nov. 21, 59.84.
- 153-A. Doctor Baker. Thomas Bird survey, 3.5 miles west of New Dimebox. Water levels, in feet below measuring point, 1940: Apr. 1, 52.84; July 9, 52.45; Nov. 21, 51.44.
- 174. Martin Mallinak. South edge of Dimebox. Water levels, in feet below measuring point, 1940: Apr. 1, 40.98; July 9, 37.17; Nov. 21, 40.30.
  - a Measurement by airline and gauge.

### Lee County -- Continued.

175. H. Hannes. North edge of Dimebox. Water levels, in feet below measuring point, 1940; Apr. 1, 18.37; July 9, 17.15; Nov. 21, 17.68.

\* ( 1%

## Leon County

- Well numbers correspond to those in Water-Supply Papers 845 and 886.
- 72. Mrs. S. F. Parker. One hundred forty feet west of U. S. Highway 75, 8.7 miles north of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, 32.99; July 10, 33.24; Nov. 22, 33.33.
- 79. S. L. Elgin. One hundred eight feet west of U. S. Highway 75, 9.6 miles north of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, dry at 69; July 10, 63.93; Nov. 22, 69.73.
- 153. M. C. Garver. Five hundred feet east of U. S. Highway 75, 1.6 miles south of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, 42.45; July 10, 39.39; Nov. 22, well filled; measurements discontinued.
- 158-A. R. W. Gardner. One hundred eighty feet southwest of U. S. Highway 75, 1.25 miles north of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, 25.28; July 10, 24.06; Nov. 22, 26.01.
- 298. R. R. Condiff. Two hundred eighty feet southwest of U. S. Highway 75, 11.2 miles south of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, 30.48; July 10, 26.68; Nov. 22, 23.11.
- 301. W. B. Riley. One hundred fifteen feet northeast of U. S. Highway 75, 10.3 miles south of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, 2.55; July 10, 3.16; Nov. 22, 3.30.
- 308. G. A. Gindratt. Six hundred sixty feet west of U. S. Highway 75, 5.9 miles south of Centerville. Water levels, in feet below measuring point, 1940: Apr. 2, 42.93; July 10, 39.33; Nov. 22, 40.30.
- 310. Mrs. Ella G. Rogers. One hundred twenty-five feet southwest of U. S. Highway 75, 0.45 mile north of Leona, 6.5 miles south of Centerville. Unused since May 3, 1939. Water levels, in feet below measuring point, 1940: Apr. 2, 10.29; July 10, 6.45; Nov. 22, 13.45.
- 368. L. L. Laningham. One hundred fifty-five feet northwest of State Highway 21, 1 mile east of Normangee. Water levels, in feet below measuring point, 1940: Apr. 2, 51.89; July 10, 51.82; Nov. 22, 51.93.
- 379. Otto Schultz. Two hundred fifteen feet north of State Highway 21, 5.8 miles west of Normangee. Water levels, in feet below measuring point, 1940: Apr. 2, 54.20; July 10, 55.53; Nov. 22, 54.36.
- 537. Mrs. M. C. Garver. Thirty feet north of well 153. One and six-tenths miles south of Centerville. Used dug domestic and stock well, diameter 42 inches, depth 45 feet. Measuring point, top of concrete and brick curb, 1.5 feet above land surface. Equipped with hand pump. Water levels, in feet below measuring point: Dec. 7, 1939, 41.27; Apr. 2, 1940, 41.30; July 10, 1940, 41.27; Nov. 22, 1940, 41.41.

# Lubbock County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

- 3a. E. E. Winters.  $NE_{\frac{1}{4}}^{\frac{1}{4}}NE_{\frac{1}{4}}^{\frac{1}{4}}$  sec. 43, blk. P, east bank of draw, 17 miles northwest of Lubbock. Water level, in feet below measuring point, 1940: Nov. 18, 29.24.
- 37. S. E. Blair.  $NW_{4}^{1}NW_{4}^{1}$  sec. 149, blk. C, 17 miles northeast of Lubbock.

	Water	level, in	feet below	measuring poin	it, 1937, 1939-40	
Date	_	Water level	Date	Water level	Date	Water level
Mar. 1 Dec. 2	2, 1937 2		Jan. 10, Dec. 16	1939 74.13 74.49	Nov. 19, 1940	75.37

## Lubbock County -- Continued.

- 64a. W. O. Fortenberry.  $NE_{1}^{1}NW_{2}^{1}$  sec. 30, blk. D, 0.4 mile east of U. S. Highway 87, 10.5 miles north of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 86.49; Nov. 13, 87.14.
- 67a. Ward Crim.  $SW_2^1SW_2^1$  sec. 27, blk. D, 0.8 mile west of U. S. Highway 87, 10.5 miles north of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 77.87; July 10, 77.90; Nov. 13, 80.64.
- 74a. J. S. George.  $SW_2^1SE_4^1$  sec. 37, blk. A, 1.5 miles west of U. S. Highway 87, 6.5 miles north of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 35.60; July 10, 35.81; Nov. 13, 36.30.
- 74b. J. S. George. NELNW1 sec. 37, blk. A, 7.5 miles north of Lubbock. Water level, in feet below measuring point, 1940: Mar. 13, 37.89.
  - 75a. Measurements discontinued.
- 77a. J. H. Felton.  $SE_2^{1}SE_2^{1}$  sec. 35, blk. A, 6.5 miles north of Lubbock on U. S. Highway 87. Water levels, in feet below measuring point, 1940: Mar. 13, 71.16; Nov. 13, 73.44.
- 81. J. E. Vickers. NE2SE2 sec. 27, blk. A, 0.2 mile west of U. S. Highway 87, 5 miles north of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 46.92; Nov. 13, 48.14.
- 99. R. B. Gray. SWANEA sec. 37, blk. P, 4 miles northwest of Shallowater. Water level, in feet below measuring point, 1940: Nov. 18, 39.67.
- 101. 0. P. Bowser. SW cor.  $SW_4$  sec. 38, blk. P, 4 miles west of Shallowater. Water levels, in feet below measuring point, 1940: Mar. 13, 63.88; Nov. 18, 66.64.
- 107. B. G. Lokey. SwinEi sec. 27, blk. D5, on north side of U. S. Highway 84, in Shallowater. Water levels, in feet below measuring point, 1940: Mar. 13, 50.08; Nov. 18, 50.56.
  - 118. No measurements made in 1940.
- 121. Claude Campbell. SE sec. 1, blk. D6, north of Carlisle Public School, north of State Highway 24. Water levels, in feet below measuring point, 1940: Mar. 26, 76.92; Nov. 18, 78.20.
- 123. Travis Tubbs.  $SW_2^1NW_4^1$  sec. 9, blk. JS, 6 miles west of Imbbock. Water level, in feet below measuring point, 1940: Nov. 18, 66.54.
- 128. Rufus Rush. West line of SW1NE1 sec. 3, blk. E-2, 0.6 mile north of State Highway 24, 2.5 miles west of Lubbock. Water level, in feet below measuring point, 1940: Nov. 18, 44.95.
- 138. Edith Collie. NEINEL sec. 25, blk. JS, 7 miles northwest of Imbbook. Water levels, in feet below measuring point, 1940; Mar. 13, 41.42; Apr. 4, 41.30; Nov. 18, 41.60.
- 139. O. C. Ballard. NE $\frac{1}{4}$  sec. 23, blk. JS, 7 miles northwest of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 25.88; Apr. 4, 26.01; Nov. 18, 27.07.
- 150a. M. C. Gibson. NW1NW1 sec. 14, blk. A, between U. S. Highway 84 and A. T. & S. F. R. R., 5.5 miles northwest of Lubbock. Water levels, in feet below measuring point, 1940; Mar. 13, 28.30; July 10, 28.49; Nov. 18, 29.00.
- 151. Broadview School. SEANWA sec. 14, blk. A, on south side of U. S. Highway 84, 3 miles northwest of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 27.24; July 10, 27.44; Oct. 27, 27.97; Nov. 18, 28.06.
- 154. J. S. Hamilton.  $NE_2^4SW_4^4$  sec. 22, blk. A, 4 miles west of Lubbock. Water level, in feet below measuring point, 1940: Nov. 18, 40.34.

## Lubbock County -- Continued.

- 156. J. M. Phillips. SWISE sec. 18, blk. A, 0.6 mile south of U. S. Highway 84, 3 miles northwest of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 41.37; Nov. 18, 43.38.
- 162b.  $NW_2^4SE_2^4$  sec. 19, blk. A, 110 Temple Avenue, Lubbock. Water level, in feet below measuring point, 1940: Mar. 13, 59.78.
  - 185. Filled and abandoned. Measurements discontinued.
- 188. State Experiment Farm. NE NW sec. 5, blk. 0, 3 miles east of Lubbock. Water levels, in feet below measuring point, 1940: Feb. 28, 77.92; Nov. 19, 79.38.
  - 197. Measurements discontinued.
- 199a.  $SW_4^1NE_4^1NE_4^1$  sec. 2, blk. A, 2.5 miles northeast of Lubbock. Water level, in feet below measuring point, 1940: Mar. 22, 73,51.
- 200. Northeast Ward School.  $SW_2^1SW_3^1$  sec. 41, blk. A, 3.75 miles northeast of Labbock. Water level, in feet below measuring point, 1940; Mar. 22, 56.55.
  - 202. Measurements discontinued.
- 219. Ed. Harrison. NW ccr. sec. 5, blk. RG, 9.5 miles east of Lubbock. Water level, in feet below measuring point, 1940: Nov. 19, 46.92.
  - 220. Measurements discontinued.
- 221. Bill Turner. NW cor.  $NW_2^4$  sec. 156, blk. C, on south side of U. S. Highway 62, 2 miles east of Idalou. Water level, in feet below measuring point, 1940: Nov. 19, 56.49.
- 222. R. T. Groves. NWinEi sec. 10, blk. RG, 1.2 miles south of U. S. Highway 62, 12 miles east of Lubbock. Water level, in feet below measuring point, 1940: Mar. 22, 53.02.
- 223. W. C. Grimes.  $SE_2^1SE_2^1$  sec. 11, blk. RG, 12 miles east of Lubbock. Water level, in feet below measuring point, 1940: Mar. 22, 47.86; Nov. 19, 47.80.
- 225. Acuff Public School. NW1SW2 sec. 122, blk. C. 13.5 miles east of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 22, 53.18; Nov. 18, 53.67.
- 228. NELSE sec. 91, blk. C, 6 miles east of Idalou, along U. S. Highway 62 and 0.6 mile south on dirt road. Water levels, in feet below measuring point, 1940: Mar. 22, 70.29; Nov. 19, 70.37.
  - 252b. No measurements made in 1940.
  - 272a. Measurements discontinued.

272b. Texas Pacific Coal and Oil Company. NW1NW1 sec. 4, blk. B, at stucco house, west of cemetery, 2 miles southeast of Lubbock. Used drilled domestic well, diameter 12 inches. Measuring point, top of concrete curb, level with land surface. Equipped with rope and bucket.

Water level, in feet below measuring point, 1938-40

Date	Water level	Date	Water level		Water level
June 17, 1938 21 28	40.61	Dec. 12, 1938 June 19, 1939 Oct. 10		Dec. 17, 1939 Nov. 19, 1940	40.90 43.27

278. Ed Putty.  $NW_2^1NE_2^1$  sec. 8, blk. B, 1.75 miles south of Lubbock. Water level, in feet below measuring point, 1940: Nov. 19, 79.88.

279. No measurements made in 1940.

284a. Southeast Ward Public School. SE SE sec. 1, blk. E, 3.5 miles southeast of Lubbock. Water level, in feet below measuring point, 1940: Nov. 19, 45.14.

# Lubbock County -- Continued.

- 301. New Hope Public School. SE cor. sec. 68, blk. S, 8 miles south of Lubbock. Water level, in feet below measuring point, 1940: Nov. 19, 58 33
- 303b. Labbock County. In right-of-way of county road, SE cor. sec. 18, blk. E, 8.5 miles south of Labbock. Water levels, in feet below measuring point, 1940: Aug. 2, 74.51; Nov. 19, 73.29.
- 314. T. B. Zelner. SW cor.  $SE_4^1SW_4^1$  sec. 17, blk. B, 4 miles southwest of Lubbock. Water levels, in feet below measuring point, 1940: Jan. 16, 45.58; Nov. 20, 49.39.
  - 316. No measurements made in 1940.
  - 316a. Measurements discontinued.
  - 332. No measurements made in 1940.
- 336a. Mary Coons.  $SW_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 26, blk. AK, 0.8 mile south of U. S. Highway 62, 10 miles southwest of Lubbock. Water levels, in feet below measuring point, 1940: Jan. 16, 79.90; July 31, 80.02; Nov. 20, 80.13.
- 339. J. E. Hinson.  $NW_2^1NE_2^1$  sec. 34, blk. AK, 8.5 miles west of Lubbock. Used drilled irrigation well, diameter 15 inches, depth 162 feet. Measuring point, top of  $\frac{1}{2}$ -inch airline hole in pump base, 0.5 foot above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1937, 1939-40

Date	Water level	Date	Water level	Date	Water level
May 18, 1937	62.68	Jan. 4, 1939	62.30	Jan. 16, 1940	62.96
Dec. 23	62.23	Oct. 11	63.33	Nov. 20	64.34

- 355. J. A. Medlock.  $SW_2^1NE_2^1$  sec. 26, blk. 20, 0.5 mile west of U. S. Highway 87, 9.5 miles south of Imbbock. Water levels, in feet below measuring point, 1940: Jan. 16, 85.24; Nov. 20, 86.21.
- 369. A. D. Thomas.  $NE_4^1NW_4^1$  sec. 26, blk. 20, 0.5 mile west of U. S. Highway 87, 9.5 miles south of Lubbock. Water level, in feet below measuring point, 1940: Nov. 19, 81.67.
  - 372. Measurements discontinued.
  - 376. No measurements made in 1940.
  - 379a. Measurements discontinued.
- 383. H. B. Hobgood.  $NW_{2}^{1}NW_{2}^{1}$  sec. 21, blk. CB, 0.2 mile east of U. S. Highway 62, 14 miles southwest of Lubbock. Water levels, in feet below measuring point, 1940: Jan. 16, 73.84; Nov. 20, 73.99.
  - 386. Measurements discontinued.
- 387. W. J. Garrett. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, blk. B, 0.6 mile south of junction of U. S. Highway 62 and State Highway 24.

	Water level,	, in feet below	measuring	point, 1940	
Jan. 16	41.87			Nov. 19	43.81
Mar. 26	42.23	Oct. 27	43.64		

- 388. G. D. Taylor. SW cor.  $SW_2^1NW_2^1$  sec. 15, blk. B, 0.35 mile southwest of junction of U. S. Highway 62 and State Highway 24. Water levels, in feet below measuring point, 1940: Mar. 26, 27.40; Nov. 19, 29.59.
- 389. E. Scott Jones. Center NW1NW1 sec. 15, blk. B, on east side of U. S. Highway 62, 0.2 mile southwest of junction with State Highway 24. Water levels, in feet below measuring point, 1940: Mar. 26, 28.52; July 31, 29.90; Nov. 19, 30.88.
- 391. Six and seventy-five hundredths miles west of junction of State Highway 24 and U. S. Highway 62. Water levels, in feet below measuring point, 1940: Mar. 26, 79.23; Nov. 18, 79.66.

181

#### Lubbock County -- Continued.

- 392. No measurements made in 1940.
- 393. SE cor.  $SW_2^1SW_2^1$  sec. 4, blk. 0, 0.45 mile south of U. S. Highway 82, 1.7 miles east of Lubbock County Courthouse. Water level, in feet below measuring point, 1940: Nov. 19, 58.59.
  - 394. Measurements discontinued.
- 395. Stanton. NW cor.  $NE_{1}^{1}NE_{2}^{1}$  sec. 16, blk. A, 2.5 miles north of Lubbock County Courthouse. Water levels, in feet below measuring point, 1940: Mar. 13, 47.15; Nov. 19, 51.43.
- 397. NE cor.  $SE_2^4SW_2^4$  sec. 13, blk. JS, 3.5 miles north and 3.5 miles west of Lubbock County Courthouse. Water levels, in feet below measuring point, 1940: Mar. 13, 18.54; Apr. 4, 18.55; July 10, 18.80; Nov. 18,
- 398. E. E. Ireland.  $SE_4^1SE_4^1$  sec. 36, blk. D5, 8.5 miles northwest of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 15.69; July 10, 16.11; Nov. 18, 16.83.
- 399. Couch.  $SE_2^1NW_2^1$  sec. 32, blk. D, 1.5 miles west of U. S. Highway 87, 9 miles north of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 42.12; July 10, 42.35. Measurements discontinued.
- 401. SE cor.  $SE_2^2NW_4^2$  sec. 39, blk. D, 0.6 mile west of U. S. Highway 87, 8 miles north of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 13, 70.63; July 10, 70.64; Nov. 13, 70.98.
- 402. Fort Worth & Denver City Railway Company.  $SW_2^1SW_2^1$  sec. 65, blk. A, on railway right-of-way at Kitalou Switch, 0.2 mile north of U. S Highway 62. Water levels, in feet below measuring point, 1940: Mar. 22, 39.88; Nov. 19, 40.91.
- 403. SW cor. SW SSE sec. 56, blk. A, 8 miles northeast of Lubbock. Water levels, in feet below measuring point, 1940: Mar. 22, 41.41; Nov. 19, 43.42.

#### Lynn County

Well numbers correspond to those in Water-Supply Papers 840, 845, and

604a.  $SE_{4}^{1}NE_{4}^{1}$  sec. 391, blk. 5, 6.7 miles north of courthouse in Tahoka. Used drilled domestic well, diameter  $4\frac{1}{2}$  inches, depth 67 feet. Measuring point, top of steel casing, 0.2 foot above land surface. Equipped with hand pump.

Water level. in feet below measuring point, 1938-40

Date	Water level	Date	Water level	Date	Water level
July 22, 1938 Jan. 23, 1939	53.70 53.79	Aug. 10, 1939 Mar. 1, 1940	53.77 53.96	Aug. 2, 1940	54.08

- 605. L. King. NE cor. NE sec. 396, blk. 5, T. T. R. R. Co., 8.3 miles north of Tahoka. Water levels, in feet below measuring point, 1940: Mar. 1, 63.96; Aug. 2, 54.12.
- 607.  $W_2^1$  sec. 3, blk. D23, 14.2 miles north of Tahoka. Water level, in feet below measuring point, 1940: Mar. 1, 109.33.
- 608.  $NE_4^4NE_4^1$  sec. 419, blk. 1, D. & S. E. R. R. Co., 14.4 miles north of Tahoka. Water levels, in feet below measuring point, 1940: Mar. 1, 100.18; Aug. 2, 99.80.
  - 701. No measurements made in 1940.
- 703. T. L. McKinney. SW cor.  $NE_{4}^{1}SE_{4}^{1}$  sec. 34, blk. 8, E. L. & R. R. R. R. Co., 3.65 miles north of O'Donnell. Water level, in feet below measuring point, 1940: Mar. 1, 64.70.

## Lynn County -- Continued.

705. No measurements made in 1940.

712. L. C. Johnson. In Tahoka, 0.55 mile south of Lynn County Courthouse. Water level, in feet below measuring point, 1940: Mar. 1, 55.25; measurements discontinued.

713a. City of Tahoka. In Tahoka, 100 feet northeast of city standpipe. Unused drilled well. Measuring point, top of heavy timber pump base, 1.0 foot above concrete base.

Water level, in feet below measuring point, 1938-40

Date	Water level	Date	Water level	Date	Water level
July 22, 1938 Jan. 23, 1939	82.46 81.92	Aug. 10, 1939 Mar. 1, 1940	81.22 80.69	Aug. 2, 1940	80.42

803. City of O'Donnell. In O'Donnell, 100 feet north of city water tower. Water level, in feet below measuring point, 1940: Mar. 1, 69.75. Measurements discontinued.

806. Parker. SW cor. NW1NW1 sec. 53, blk. 8, 0.6 mile west and 0.2 mile north of 0'Donnell water tower. Water levels, in feet below measuring point, 1940: Mar. 1, 32.74; Aug. 2, 34.90.

## Martin County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

130. Charles Logsdon. NEINW sec. 16, blk. 34, T. 3 N., 1.5 miles west of Ackerly. Unused drilled well, depth 97 feet. Measuring point, top of concrete curb, 0.2 foot above land surface.

Water level, in feet below measuring point, 1936, 1938-40 90.20 Aug. 2, 1940 Apr. 28, 1936 Jan. 27, 1939 90.41 91.18 Apr. 29, 1938 July 19 90.78 Aug. 10 90.12 Nov. 25 89.96 Mar. 90.47 1940 89.58

241. E. B. Dickenson.  $SW_2^1SE_2^1$  sec. 1, blk. 37, T. 1 N., 11 miles northwest of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 81.96; Nov. 24, 82.32.

292-A. Florence Konz.  $SE_2^{\dagger}SE_2^{\dagger}$  sec. 35, blk. 37, T. l N., 7.5 miles northwest of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 31.41; Aug. 1, 31.55; Nov. 23, 31.60.

336. John Atchison.  $SE_2^1SW_2^1$  sec. 43, blk. 36, T. 1 S., 5.5 miles northwest of Stanton. Water level, in feet below measuring point, 1940; Jan. 17, 43.05.

361. W. C. Flanagan.  $NW_2^1SW_2^1$  sec. 1, blk. 36, T. 1 S., 2.25 miles north of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 45.45; Aug. 1, 47.08; Nov. 23, 43.41.

363. I. G. Peters. SW\(\frac{1}{2}\)Sw\(\frac{1}{2}\) sec. 3, blk. 36, T. 1 S., 2.5 miles northwest of Stanton. Water levels, in feet below measuring point, 19\(\frac{1}{2}\)O: Jan. 17, 64.40; Aug. 1, 64.93; Nov. 23, 64.66.

369. Mrs. H. L. Rhodes.  $NE_2^1NW_2^1$  sec. 6, blk. 37, T. 1 S., 5 miles west of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 40.78; Nov. 23, 41.29.

376. J. R. Reed. NW1NB1 sec. 4, blk. 37, T. 1 S., at Mustang Spring, 8.5 miles west of Stanton. Water levels, in feet below measuring point, 1940; Jan. 17, 1.65; Aug. 1, 3.62; Nov. 24, 1.84.

384. Penny Stroud. NW1NW1 sec. 7, blk. 36, T. 1 S., 4.75 miles west of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 41.51; Nov. 23, 42.73.

## Martin County -- Continued.

- 389. Measurements discontinued.
- 401. G. P. Anderson.  $SW_2^1SW_2^1$  sec. 11, blk. 36, T. 1 S., 1.25 miles northwest of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 78.38; Aug. 1, 77.59; Nov. 23, 77.59.
- 452-A. T. C. Vinson Est. Center  $SE_2^1$  sec. 23, blk. 37, T. 1 S., 6 miles southwest of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 28.62; Aug. 1, 29.13; Nov. 23, 29.31.
- 455. R. Yantis.  $NW_{2}^{1}SE_{2}^{1}$  sec. 24, blk. 37, T. 1 S., 5 miles west of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 32.30; Aug. 1, 32.75.
  - 457. No measurements made in 1940.
  - 467. No measurements made in 1940.
- 468. Palmer heirs.  $SW_2^1NE_2^1$  sec. 23, blk. 36, T. 1 S., in Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 62.54; Aug. 1, 62.92; Nov. 23, 62.71.
  - 471. Measurements discontinued.
- 494-A. M. H. Nance.  $NW_2^1NW_2^1$  sec. 29, blk. 36, T. 1 S., 3.75 miles west of Stanton. Water levels, in feet below measuring point, 1940: Jan. 17, 47.70; Aug. 1, 47.17.
- 610. Woodard School.  $SW_2^1SE_2^1$  sec. 135, Simp, Holloway survey, 1.5 miles west and 5 miles north of Tarzan. Water levels, in feet below measuring point, 1940:  $\hat{J}$ an. 17, 23.28; Aug. 1, 23.92; Nov. 24, 24.19.
- 655. H. B. Schick.  $NE_1^2NW_2^1$  sec. 23, blk. 37, T. 2 N., 3 miles west of Tarzan. Water levels, in feet below measuring point, 1940: Jan. 17, 28.16; Aug. 1, 28.42; Nov. 24, 28.59.
- 665. G. T. Hall.  $SW_2^4SE_2^4$  sec. 29, blk. 57, T. 2 N., 3.4 miles west of Lenorah. Water levels, in feet below measuring point, 1940: Jan. 17, 57.78; Aug. 1, 58.03; Nov. 24, 58.16.
- 674. W. H. Badgett.  $NE_{2}^{1}NE_{2}^{1}$  sec. 4, blk. 38, T. 1 N., 4.5 miles south and 3.5 miles west of Tarzan. Water levels, in feet below measuring point, 1940: Jan. 17, 23.18; Aug. 1, 23.63; Nov. 24, 23.86.
- 687. J. W. Meek.  $SE_2^4SE_2^4$  sec. 6, blk. 38, T. 1 N., 1 mile south of Badgett Public School. Water levels, in feet below measuring point, 1940; Jan. 17, 23.71; Nov. 24, 24.29.
- 690. W. W. Williams.  $SE_2^{\dagger}SE_2^{\dagger}$  sec. 5, blk. 38, T. 1 N., 1 mile east and 1 mile south of Badgett Public School. Water level, in feet below measuring point, 1940: Jan. 17, 35.85.

#### Matagorda County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 3. Southern Pacific Railroad. Six-tenths mile west of Highway intersection at Midfield, 15 miles west of Bay City. Not used since Dec. 17, 1938. Water levels, in feet below measuring point, 1940: Mar. 11, 9.04; Dec. 11, 12.88.
- 33. Turtle Bay School. One and eight-tenths miles east of county line, 5 miles west of Palacios. Water level, in feet below measuring point, 1940: Dec. 11, 2.61.
- 40. City of Palacios. Seven hundred feet northwest of new city well in Palacios. Water levels, in feet below measuring point, 1940: Mar. 11, 11.68; Dec. 11, 14.35.
  - 46. No measurements made in 1940.

## Maverick County

Well number corresponds to that in Water-Supply Papers 777, 840, 845 and 886.  $^{\rm t}$ 

M3-21. Eighteen miles west of LaPryor. Water levels, in feet below measuring point: Aug. 21, 1939, 46.37; July 31, 1940, 46.45.

## Medina County

Well numbers correspond to those in Water-Supply Papers 678, 840, 845 and 886.

I-2-1. W. A. Weynand. Seven and eight-tenths miles north of D'Hanis.

	Water	level, i	n feet be:	low measur:	ing point,	1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16 Feb. 21 Mar. 18	a194.65 196.31 197.25	May 20 June 17 July 22	198.20 198.65 a202.88	Aug. 23 Sept.26	199.82 201.36	Oct. 21 Dec. 2	a202.46 204.37

I-2-7. Alfred Schlentz. Eight and two-tenths miles north-northwest of Hondo.

		Water	level, in	feet be	low measuri	ng point,	1940	
Jan.			Apr. 23	217.85	July 22	217.70	Oct. 21	224.68
Feb.	21	218.82	May 20	219.84	Aug. 23	221.03	Dec. 2	226.40
Mar.	18	219.95	June 17	220,12	Sept.24	223.04		

I-3-2. Wilson. At water works in Hondo, 40 feet south of well I-3-1. Used drilled public supply well, diameter 12 inches, depth 1,600 feet. Measuring point, top of hole in pump base, 1.0 foot above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1930, 1938-40

Date	Water level	Date	Water level	Date	Water level
Feb. 10, 1930		Jan. 16, 1940	178.98	June 17, 1940	182.49
Sept.23, 1938		Feb. 25	180.61	Oct. 25	186.09
15, 1939		Mar. 18	181.66	Dec. 2	183.60

I-3-3. Gus Britch. Four and seven-tenths miles north of Hondo.

	water	Tevel,	in reet be.	Low measur	ing point,	1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16 Feb. 21 Mar. 18	192.62 192.65 194.62	Apr. 23 May 20 June 17	193.96	July 22 Sept.24	194.25 199.99	Oct. 21 Dec. 2	201.94

I-3-4. H. W. McClain. Seven and two-tenths miles north by east of Hondo.

	Water	level, in	feet bel	low measuri	ng point,	1940	
Jan. 16 Feb. 21 Mar. 18	192.55	May 20	195.35	July 22 Aug. 23 Sept.24	195.74 198.02 199.59		202.23

I-3-5. L. H. Heyen. Six miles north by east of Hondo.

			5					
		Water	level, in	n feet bel	low measuri	ng point,	1940	
Jan.	16	162.82	Apr. 23	166.82	July 22	167.53	Oct. 21	172.64
Feb.	21	164.62	May 20	167.29	Aug. 23	169.88	Dec. 2	173.97
Mar.	18	165.82	June 17	168.09	Sept.24	171.43		

a Pumping slowly.

#### Medina County -- Continued.

I-4-18. Ross Kenedy Estate. Three and seven-tenths miles east of Sabinal.

	Water	level,	in feet be	low measur	ing point	, 1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16 Feb. 24 Mar. 21	227.90 228.26 229.85	Apr. 23 May 20 June 17	229.90	July 22 Aug. 23 Sept.21	228,84 231,13 232,58	0ct. 21 Dec. 2	233.92 234.73

I-4-29. Illinois Pipe Line Company. Six and three-tenths miles southwest of  $D^t Hanis$ .

		Water	level	l, in	feet be	low measuri	ng point	1940		
Jan.						June 17				
Feb.	21 2.	16.79	May	20	218.04	July 22	216.73	Dec.	_ 2	222.06

I-4-30. Virgil Johnson. Twelve miles southeast by east of D'Hanis.

	Water	· level, in	feet be.	low measuri	ng point	.1940	
Jan. 16	53.51	Apr. 23	56.49	July 22	55,03	Oct. 21	60.08
Feb. 21	55.03	May 20	56.32	Aug. 23	57.68	Dec. 2	60.25
Mar. 18	56.26	June 17	55.94	Sept.24	59.04		

XM-1. Lenard Otto. North side of U. S. Highway 90, 1.0 mile east of Castroville.

		Water	level	., in	feet be	low me	asuri	ng point,	1940		
Jan. 1	L7 5	3.27	Mar.	21	69.69	June	17	63.61	Sept.	21	62.80
Feb. 2	21 5	5.11	Apr.	26	66.00	July	22	63,60	Oct.	21	57.98
Mar. ]	18 6	9.99	May	20	66.38	Aug.	23	64.25	Dec.	5.	53.87

XM-2. F. C. Stinson. Five and nine-tenths miles north of intersection of gravel road with U. S. Highway 90 at point 300 feet east of Medina River Bridge, Castroville.

Water	level, in	feet be	low measuri	ng point,	1940	 
Feb. 21 154.59	May 20	157.58	July 22 Aug. 23 Sept.24	155.86 159.44 160.42	Dec.	160.85 155.46

XM-3. John Krenmueller. South side of U.S. Highway 90, on east side of intersection of highway and crossroad at Dunley, 7 miles east of Castroville.

	Water	level, in	feet be	low measuri	ng point	, 1940	
Jan. 17 Feb. 21 Mar. 18	69.04	Apr. 26 May 20 June 17		July 25 Sept.26		0ct. 25 Dec. 2	70.50 70.27

# Midland County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

36. In Midland, 2 blocks west and 2 blocks south of Midland County Courthouse. Water levels, in feet below measuring point, 1940: Jan. 17, 32.72; Aug. 1, 33.35; Nov. 23, 33.41.

37. Elmer Lamb. In Midland, 5 blocks south and 2 blocks east of Texas & Pacific Railway depot. Water levels, in feet below measuring point, 1940: Jan. 17, 41.95; Aug. 1, 46.07; Nov. 23, 42.30.

54a.  $SE_4^1$  sec. 42, blk. 38, T. 1 S., on south bank of Midland Draw about 250 yards southeast of concrete bridge on U. S. Highway 80, 2.5 miles northeast of Midland. Unused dug irrigation well, diameter 6 feet. Measuring point, top of concrete curb, 0.2 foot above land surface.

# Midland County -- Continued.

#### 54a .-- Continued.

Water level, in feet below measuring point, 1937-40

Date	Water level	Date	Water level	Date	Water level
Aug. 5, 1937 July 21, 1938 Jan. 27, 1939	20.19 20.31 19.22	Aug. 11, 1939 Jan. 17, 1940	20.46 21.37	Aug. 1, 1940 Nov. 23,	21.87 22.56

54b.  $SE_1^1$  sec. 42, blk. 38, T. 1 S., 300 feet northeast of well 54a in bed of draw. Unused drilled irrigation well, diameter 25 inches. Measuring point, top of 25-inch iron casing, 2.5 feet above land surface.

 Water level, in feet below measuring point, 1938-40

 July 21, 1938
 14.08
 Jan. 17, 1940
 15.17
 Nov. 23, 1940
 16.38

 Aug. 11, 1939
 14.42
 Aug. 1
 15.84

- 55. Joe Youngblood.  $SE_1^1NE_1^1$  sec. 42, blk. 38, T. 1 S., 2.5 miles northeast of Midland. Water levels, in feet below measuring point, 1940; Jan. 17, 31.61; Aug. 1, 32.55; Nov. 23, 32.86.
- 78. C. J. Weathered.  $NW_{2}^{1}NW_{2}^{1}$  sec. 34, blk. 38, T. 1 S., 5 miles northeast of Midland. Water levels, in feet below measuring point, 1940; Jan. 17, 51.16; Aug. 1, 51.17; Nov. 23, 51.16.
- 98. Texas Highway Department. On right-of-way of U. S. Highway 80, 9.5 miles northeast of Midland. Water levels, in feet below measuring point, 1940: Jan. 17, 39.85; Aug. 1, 40.08; Nov. 23, 40.11.
- 222. R. J. Webb.  $NW_1^4NR_2^4$  sec. 23, blk. 41, T. 2 S., on south side of U. S. Highway 80, 12.5 miles southwest of Midland. Water levels, in feet below measuring point, 1940: Jan. 17, 26.12; Aug. 1, 34.70; Nov. 23, 34.22.

# Milam County

- Well numbers correspond to those in Water-Supply Papers 845 and 886.
- 14-A. Santa Fe R. R. In Milano, 220 feet north-northwest corner of freight depot. Water levels, in feet below measuring point, 1940: Apr. 10, 88.99; July 9, 89.07; Nov. 21, 89.03.
- 165. John McClerron, Jr. State Highway 36, 8.2 miles northwest of Milano. Water levels, in feet below measuring point, 1940: Apr. 1, a/17.12; July 9, 14.37; Nov. 21, 14.81.
- 278. Charles Jones. Nine and one-tenth miles northeast of Milano. Water levels, in feet below measuring point, 1940: Apr. 1, 36.63; July 9, 37.01; Nov. 21, 36.38.
- 285. Bud Smith. Five hundred eighty feet northwest of State Highway 43, 1 mile southeast of highway bridge over Brazos River. Water levels, in feet below measuring point, 1940: Apr. 1, 24.04; July 9, 23.73; Nov. 21, 23.91.
- 311. M. E. Ashley. One-tenth mile north of State Highway 43, 1.9 miles northeast of Milano. Water levels, in feet below measuring point, 1940: Apr. 1, 55.90; July 9, 56.38; Nov. 21, 55.89.
- 333. Clyde Hensley. One-half mile east of State Highway 36, 6.75 miles northwest of Milano. Water levels, in feet below measuring point, 1940: Apr. 1, 94.61; July 9, 94.77; Nov. 21, 94.78.
- 364. Rebecca Graham. In pasture, 82 feet north of State Highway 36, 5.4 miles southeast of Milano. Water levels, in feet below measuring point, 1940: Apr. 1, 61.09; July 9, 57.32; Nov. 21, 57.78.

a Pumping slowly.

## Montgomery County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

16. Measurements discontinued.

22. City of Conroe. In northeast corner of brick pump house, 40 feet east of U. S. Highway 75 (business route) through Conroe. Unused drilled public supply well, diameter 8 inches, depth 1,464 feet, screen set at 1,125 to 1,272 feet. Measuring point, top of hole in flange cover, 2 feet above land surface.

Water level, in feet below measuring point, 1931, 1939-40

Date	Water level	Date	Water level	Date	Water level
June 3, 1931 15, 1939 Aug. 3 Sept.25	1.38 4.67 3.78 a 9.69	Dec. 19, 1939 Feb. 15, 1940 May 1 June 28	3.65 3.32 2.94 4.30	Aug. 21, Oct. 4 Dec. 5	a 13.83 a 10.00 2.40

29. Brown Estate. Forty feet west of U. S. Highway 75, 1.8 miles south of court house in Conroe.

	Water level	, in feet below	w measuring	point,	1940	
Feb. 15	27.54	June 28	26.76	Oct.	4	27.60
May l	27.26	Aug. 25	27.02	Dec.	5	26.50

30. L. Johnson. Thirty feet north of white bungalow, about 250 feet west of U. S. Highway 75, 2 miles south of county court house in Conroe.

	Water level	, in feet bel	ow measuring	g point	, 1940	
Feb. 15	30.39	June 28	29.52	Oct.	4	30.25
May 1	29.90	Aug. 25	29.94	Dec.	5	(b)

45. Blair and Sons. At Tamina store, 0.6 mile east of U. S. Highway 75, 9.2 miles south of county court house in Conroe.

	Water level	, in feet h	elow measuring	point,	1940	_
Feb. 15	25.40	June 28	26.10	Oct.	4 26.4	.0
May 1	26.02	Aug. 25	26.40	Dec.	5 24.1	.5

46. E. W. Castleschout. Sixty feet west of U. S. Highway 75, 9.5 miles south of county court house in Conroe.

	Water level	, in feet bel	ow measuring	point,	1940	
Feb. 15	32.44	June 28	33.64	Oct.	4	33.78
May 1	31.52	Aug. 25	33.96	Dec.	5	32.62

57. Hicks. Two and twenty-five hundredths miles northwest of Conroe, 50 feet southwest of well 16. Used dug domestic well, diameter 3 feet, depth 49 feet. Measuring point, top of casing 2.3 feet above land surface. Equipped with rope and bucket. Water levels, in feet below measuring point, 1940: Oct. 3, 46.70; Dec. 5, 46.50.

#### Moore County

Well numbers correspond to those in Water-Supply Paper 886.

- 2. Texas Highway Department. Along U. S. Highway 87, 6.2 miles north of junction with State Highway 5. Water level, in feet below measuring point, 1940: Apr. 12, 50.52.
  - 3. No measurements made in 1940.

#### Nacogdoches County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

66. Texas Highway Department. East side of Highway 35, 11.75 miles northeast of Nacogdoches. Measured flow, in gallons per minute, 1940: Apr. 6, 2.55; July 13, 3.72; Nov. 27, 10.91.

a Nearby well 23 pumping. b Well filled; measurements discontinued.

## Nacogdoches County -- Continued.

- 70. A. M. Foshee. Four and one-fourth miles southwest of Garrison. Water levels, in feet below measuring point, 1940: Apr. 6, 21.41; July 13, 21.27; Nov. 27, 22.05.
- 76. Ed Weatherly. One-fourth mile northwest of railroad depot in Garrison. Water levels, in feet below measuring point, 1940: Apr. 6, 21.81; July 13, 10.86; Nov. 27, 7.60.
- 113. T. H. Hill. Seven and eight-tenths miles northeast of Nacogdoches. Water levels, in feet below measuring point, 1940: Apr. 6, 12.49; July 13, 13.97.
- 113-A. A. W. McCruistian. Seven and two-tenths miles northeast of Nacogdoches. Equipped with automatic pump since July 1940. Water levels, in feet below measuring point, 1940: Apr. 6, 75.31; July 13, 75.69; Nov. 27, 76.41.
- 120. Southern Ide Company. Thirty-five hundredths mile south of railroad station in Nacogdoches. Water levels, in feet below measuring point, 1940: Apr. 7, 12.31; July 14, 18.92; Nov. 27, 19.79.
- 120-A. Southern Ice Company. Thirty feet south of well 120. Unused drilled industrial well, diameter 6 inches, depth about 500 feet. Measuring point, top of flange at top of casing, 1.0 foot above land surface. Water levels, in feet below measuring point: Dec. 13, 1939, 0.30; Apr. 7, 1940, 0.50; July 14, 1940, 5.43; Nov. 27, 1940, 8.13.
- 121. City of Nacogdoches. In city park, 100 feet west of well 122, 0.55 mile north of railroad in Nacogdoches. Water levels, in feet below measuring point, 1940: Apr. 7, 35.57; July 14, 42.70; Nov. 28, 42.03.
- 122. City of Nacogdoches. In city park, 0.55 mile north of railroad station in Nacogdoches, 100 feet east of well 121. Water levels, in feet below measuring point, 1940: Apr. 7, 32.54; July 14, 40.52; Nov. 28, 38.96.
- 128. R. L. Whitmire. Sixty feet east of State Highway 35, 3.85 miles north of Nacogdoches. Water levels, in feet below measuring point, 1940: Apr. 6, 20.99; July 13, 21.49; Nov. 27, 15.13.
- 132. M. H. Dennard. At junction of State Highways 26 and 35, 5.7 miles north of Nacogdoches. Water levels, in feet below measuring point, 1940: Apr. 6, 42.09; July 13, 42.21; Nov. 27, 43.15.
- 178. Shell Pipe Line Company. Twelve miles west of Nacogdoches. Used drilled domestic and industrial well, diameter 5-3/16 inches. Measuring point, top of steel plate supporting water pipe, 0.2 foot above land surface. Equipped with electric driven cylinder pump. Water levels, in feet below measuring point, 1940: Apr. 7, 81.51; July 14, 83.72; Nov. 27, 85.28; Nov. 28, 85.31.
- 198. Piney Woods Country Club. Four and eight-tenths miles south-southeast of Nacogdoches. Water levels, in feet below measuring point, 1940: Apr. 7, 3.73; July 14, 4.14; Nov. 27, 3.10.
- 199. Hillard Stone. Four and two-tenths miles south-southeast of Nacogdoches. Water levels, in feat below measuring point, 1940: Apr. 7, 20.27; July 14, 20.38; Nov. 27, 22.56.
- 271. L. C. Jacobs. One mile southeast of Woden, 10.5 miles southeast of Nacogdoches. Unused drilled oil test well, diameter 6 inches, depth 400 feet. Measuring point, top of casing, 7 feet above land surface. Water levels, in feet above measuring point, 1940; Apr. 7, flowing; July 13, a/34.

a Measured with altitude gage.

## Navarro County

Well numbers correspond to those in Water-Supply Papers 845 and 886.

- l. Dr. Ratliff. In Richland. Water levels, in feet below measuring point, 1940: Apr. 2, 24.22; July 11, 24.69; Nov. 24, a/13.18.
- 2. J. L. Stewart. Four and seven-tenths miles east of Corsicana. Water levels, in feet below measuring point, 1940: Apr. 2, 24.48; July 11, 24.48; Nov. 24, 28.31.
- 3. Zach Banks. One-tenth mile south of State Highway 31, 4.7 miles east of Corsicans. Water levels, in feet below measuring point, 1940: Apr. 3, 25.87; July 11, 26.05; Nov. 24, 26.07.
- 4. Wilson and Burk. Eight miles west of Corsicana. Used during ginning season, 1940. Water levels, in feet below measuring point, 1940: Apr. 3, 21.14; July 11, 19.09; Nov. 24, 18.56.
- 5. City of Kerens. In Kerens. Water levels, in feet below measuring point, 1940: Apr. 3, 35.42; July 11, 34.77; Nov. 24, 34.45.

# Ochiltree County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

- 1. Measurements discontinued.
- 2. Along U. S. Highway 83, 6.3 miles south of junction with State Highway 117. Water levels, in feet below measuring point, 1940: Apr. 9, 261.72; Aug. 6, 261.97; Dec. 4, 261.88.
- 3. Along U. S. Highway 83, 6.6 miles south of junction with State Highway 117. Water levels, in feet below measuring point, 1940: Apr. 9, 218.82; Aug. 6, 219.07; Dec. 4, 218.89.
  - 4. Measurements discontinued.

## Panola County

Well numbers correspond to those in Water-Supply Papers .840, 845 and 886.

148. G. A. Menner. One-fourth mile south and 0.8 mile west of Carthage. Water levels, in feet below measuring point, 1940: Apr. 6, 18.08; July 13, 15.53; Nov. 27, 12.87.

150. City of Carthage. In pump house, 60 feet northwest of fire station in Carthage. Water levels, in feet below measuring point, 1940; Apr. 6,  $\underline{b}/62.12$ ; July 13,  $\underline{c}/77.02$ ; Nov. 27,  $\underline{b}/62.19$ 

151. City of Carthage. On north side of storage tank, in Carthage. Water level, in feet below measuring point, 1940: July 13,  $\underline{d}/74.24$ .

189. Sam Dillard. Ten and six-tenths miles west of Carthage. W levels, in feet below measuring point, 1940: Apr. 6, 18.66; July 13, 18.17; Nov. 27, 4.35.

202. Richmond Shaw. Ten and six-tenths miles west of Carthage. Water levels, in feet below measuring point, 1940: Apr. 6, 8.58; July 15, 9.18; Nov. 27, 4.35.

277. J. F. Ritter. Four miles south of Carthage. Water levels, in feet below measuring point, 1940: Apr. 6, 12.06; July 13, 10.92; Nov. 27, 11.00.

279. Mattie Solomon. Seventy feet east of U. S. Highway 79, 7.7 miles south of Carthage. Water levels, in feet below measuring point, 1940: Apr. 6, 19.94; July 13, 19.20; Nov. 27, 18.43.

a Water from roof ran into well during heavy rains. b Well 151 pumping. c Measured while pumping. d Well 150 pumping.

416230 O - 41 - 13

# Panola County -- Continued.

- 293. J. B. Hooker. Eight and nine-tenths miles south-southeast of Carthage. Water levels, in feet below measuring point, 1940: Apr. 4, 72.20; July 13, 72.03; Nov. 27, 70.93.
- 302. W. B. McDaniel. Ten and four-tenths miles south-southeast of Carthage. Water levels, in feet below measuring point, 1940: Apr. 6, 29.09; July 13, 28.77; Nov. 27, 28.66.

### Parmer County

No measurements made in Parmer County in 1940.

## Potter County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
  - 22. No measurements made in 1940.
- 38. Masterson Estate. NE1SE1 sec. 70, blk. 018, D. & P. R. R., 5 miles southwest of Masterson ranch house, 24.5 miles north of Amarillo. Water levels, in feet below measuring point, 1940: Apr. 12, 95.21; Aug. 9, 94.95; Dec. 7, 95.07.
- 38A. One and one-half miles south of well 38. Water levels, in feet below measuring point, 1940: Apr. 12, 50.10; Aug. 9, 49.98; Dec. 7, 50.17.
- 84A. West of U. S. Highway 87, 15.5 miles north of Amarillo. Water levels, in feet below measuring point, 1940: Apr. 12, 1.80; Dec. 7, 1.73.
  - 123. No measurements made in 1940.
  - 161. No measurements made in 1940.
  - 197. No measurements made in 1940.
- 210. Seven and one-half miles north of Amarillo. Water levels, in feet below measuring point, 1940: July 12, 75.57; Aug. 9, 75.20; Dec. 7, 75.35.
- 246. W. S. Birge. Three miles east of Amarillo. Water levels, in feet below measuring point, 1940: Apr. 9, 214.27; Aug. 6, 214.98; Dec. 4, 215.10.

## Randall County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
  - 5a. Measurements discontinued.
- 6a. NW cor. NW $\frac{1}{4}$  sec. 4, blk. 9, 10.5 miles north of Canyon. Water levels, in feet below measuring point, 1940: Mar. 14, 144.00; Dec. 7, 144.18.
- 76. C. H. Ray.  $NW_2^1SW_2^1$  sec. 33, blk. 1, T. T. R. R. survey, 4.75 miles north of Canyon. Water levels, in feet below measuring point, 1940: Mar. 14, 107.92; Dec. 7, 108.34.
- 83a. SE cor.  $NE_4^1$  sec. 28, blk. B5, 2 miles west of Canyon. Water levels, in feet below measuring point, 1940: Jan. 12, 79.05; Mar. 14, 79.06; July 24, 79.01.
  - 91. Measurements discontinued.
- 103. W. H. Bush Estate.  $SW_2^1NW_2^1NW_2^1$  sec. 64, blk. B5, 1.2 miles south of Canyon. Water levels, in feet below measuring point, 1940: Jan. 12, 10.71; Mar. 14, 10.68.

## Randall County -- Continued.

117. Melton Dooley.  $NR_4^1NW_4^1$  sec. 128, blk. B5, 4.75 miles south of Canyon. Water level, in feet below measuring point, 1940: Mar. 14, 41.67.

145a. SE cor. NE sec. 10, blk. B5, 7.5 miles west of Canyon. Water levels, in feet below measuring point, 1940: Jan. 12, 111.79; Mar. 14, 111.88; July 24, 111.87.

160a. NB $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, blk. B5, 9.5 miles west of Canyon. Water levels, in feet below measuring point, 1940; Jan. 12, 103.33; Mar. 14, 103.36; July 24, 103.34.

167a.  $SW_2^1SW_4^1$  sec. 22, blk. B5, 9.5 miles west of Canyon. Water levels, in feet below measuring point, 1940: Jan. 12, 105.81; Mar. 14, 105.86.

172a.  $NR_1^2NW_2^4SW_2^4$  sec. 107, blk. B5, H. & G. N. R. R., 9.5 miles south of Canyon. Water levels, in feet below measuring point, 1940: Jan. 12, 108.75; Mar. 14, 108.80; Aug. 5, 108.83.

189a. W. F. Miller.  $NE_{2}^{1}SE_{2}^{1}SW_{2}^{1}$  sec. 109, blk. M8, 2 miles east of Happy. Water levels, in feet below measuring point, 1940: Mar. 14, 96.89; Nov. 7, 97.05.

#### Roberts County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

1. One and one-half miles east of Miami.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level leve1 level 7.51 Jan. 11 7.66 Feb. 24 7.60 7.90 Apr. Aug. 30 7.67 Mar. 25 7.46 16 7.47 Dec. 6.10

- 2. Four miles west of Miami. Water levels, in feet below measuring point, 1940: Jan. 29, 73.66; Mar. 7, 73.65; Aug. 6, 74.19; Dec. 4, 74.34.
- 3. Five miles east of Miami. Water levels, in feet below measuring point, 1940: Jan. 31, 41.69; Mar. 14, 41.68.

#### Robertson County

Well numbers correspond to those in Water-Supply Papers 845 and 886.

- 1. Santa Fe R. R. At railroad station in Valley Junction, 2.4 miles southwest of Hearne. Water levels, in feet above measuring point, 1940; Apr. 1,  $\underline{a}/$  53.5; July 9,  $\underline{a}/$ 55.8; Nov. 21,  $\underline{a}/$ 54.0.
- 2. W. H. and H. A. Ely. Two and one-tenth miles southwest of city limits of Hearne. Water levels, in feet above measuring point, 1940; Apr. 1,  $\underline{a}/8.5$ ; July 9,  $\underline{a}/8.8$ ; Nov. 21,  $\underline{a}/7.8$ .
- 3. City of Hearne. In Hearne. Water levels, in feet with reference to measuring point, 1940: Apr. 1, -4.32; July 9, -0.80; Nov. 21, +0.27.
- 5. Mrs. Davidson. Five and seven-tenths miles southeast of Hearne. Water levels, in feet below measuring point, 1940: Apr. 2, 53.89; July 10, 53.99; Nov. 22, 53.75.
- 6. Venix Stubaugh. Seven and sixty-five hundredths miles northeast of Benchley. Measured flow, in gallons per minute, 1940: Apr. 2, 0.55; July 10, 0.52; Nov. 22, 0.48.
- 8. Tom Squires. Fourteen miles northeast of Benchley. Water levels, in feet below measuring point, 1940: Apr. 2, 22.30; July 10, 23.16; Nov. 22, 23.94.
  - 21. Measurements discontinued.

a Measured with altitude gauge.

## Rusk County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 16. Owner's number 1. City of Overton. In Overton. Water levels, in feet below measuring point, 1940: Apr. 5, 145.99; July 12, 149.96; Nov. 26, 144.41.
- 31. W. P. Moore. Two and forty-five hundredths miles east-northeast of Overton. Water levels, in feet below measuring point, 1940: Apr. 4, 16.40; July 12, 16.75; Nov. 26, 16.27.
- 31-A. Shell Petroleum Corporation. About 250 feet southwest of well 31. Water levels, in feet below measuring point, 1940: Apr. 4, 60.08; July 12, 59.80; Nov. 26, 56.22.
- 165. E. F. Posey. Eleven and eight-tenths miles east of Henderson. Water levels, in feet below measuring point, 1940: Apr. 5, 42.06; July 13, 42.21; Nov. 27, 40.74.
- 177. L. K. Ballow. Five and eight-five hundredths miles east of Henderson. Water levels, in feet below measuring point, 1940: Apr. 5, 16.11; July 13, 15.90; Nov. 27, 13.70.
- 179. Rosa Burt. Two and eighty-five hundredths miles east of Henderson. Water levels, in feet below measuring point, 1940: Apr. 5, 6.09; July 13, 7.07; Nov. 27, 7.03.
- 248 J. J. Colwell. Two and one-half miles west of Henderson. Water levels, in feet below measuring point, 1940: Apr. 5, 17.71; July 12, 17.06; Nov. 27, 13.76.
- 255. Z. D. Stone. Three and sixty-five hundredths miles west of Henderson. Water levels, in feet below measuring point, 1940: Apr. 5, 26.95; July 12, 26.33; Nov. 27, 24.66.
- 415. Owner's number 2. City of Henderson. Northeast side of U.S. Highway 79, in east part of Henderson. Used drilled public supply well, diameter 12½ inches, depth 558 feet. Measuring point, top of steel pump base, 3 feet above land surface. Equipped with turbine pump. Water levels, in feet below measuring point: Oct. 7, 1938, 177.98; Feb. 8, 1939, 163.38; Dec. 12, a/167; Nov. 27, a/161.
- 416. Owner's number 4. City of Henderson. East part of Henderson. Used drilled public supply well, diameter 20 inches, depth 560 feet. Measuring point, top of  $l_2$ -inch pipe, 3 feet above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1937, 1939-40

Date	Water level	Date	Water level	Date	Water level
Aug. 24, 1937 Dec. 12, 1939	170.42 b156.82	Apr. 4, 1940 July 13	b156.39 b164.85	Nov. 27, 1940	ъ150.77

- 434. J. R. Smith. Nine and thirty-five hundredths miles east of Henderson. Water levels, in feet below measuring point, 1940: Apr. 5, 28.43; July 13, 27.15; Nov. 27, c/8.95.
- 445. Owner's number 5. City of Henderson. Two thousand feet northeast of well 415, in east part of Henderson. Seldom used drilled public supply well, diameter 12 inches, depth about 1,100 feet. Measuring point, top of airline hole in inner pump base, 1.0 foot above land surface. Equipped with turbine pump. Water levels, in feet below measuring point: Dec. 11, 1939, 154.07; Apr. 4, 1940, 153.25; July 12, 1940, 158.40; Nov. 27, 1940, 149.71.
  - a Airline and gauge measurement.
  - b Shut down 11 to 13 hours.
  - c Caved.

193

## San Patricio County

58. J. D. Mills. In north half of lot 3, block 105, McCampbell subdivision, in Aransas Pass, 2.5 miles west of center of Aransas Pass. Used drilled domestic and stock well, diameter 9½ inches, depth 98 feet. Measuring point, top of 5 by 5-inch wood clamp, 2.5 feet above land surface and 10.87 feet above mean sea level. Equipped with windmill.

	Water	level,	in feet	below	measuring	point, 1938-40	
Date		Water level	Date		Water level	Date	Water level
Sept. Apr. May	6, 1938 4, 1939 2	13.20 22.70 22.51	Dec. 1 Mar. 1	2, 1939 8, 1940	26.20 24.10	Aug. 6, 1940 Nov.19	26.93 19.65

68. F. N. Edwards. In lot 9, block 86, McCampbell subdivision, 0.5 mile east-southeast of Ingleside, 4 miles southwest of Aransas Pass. Used drilled domestic and stock well, diameter 4 inches, depth 57 feet. Measuring point, hole in side of 4-inch casing, 0.2 foot above land surface, and 14.47 feet above mean sea level. Equipped with windmill.

Wate	er level,	in reet	perom me	asuring po	oint,	1938-40	
June 22, 1938 Dec. 14, 1939	17.58 25.79	Jan. Mar.	<b>4, 194</b> 0 15	25.09 18.55			20.91 19.40

69. 0. V. Coopender. In north half of lot 16, block 85, McCampbell subdivision, 4 miles west of Aransas Pass. Used drilled domestic well, diameter 4 inches, depth 60 feet. Measuring point, top of casing, 5.9 feet above land surface and 17.55 feet above mean sea level. Equipped with windmill.

	Water	level,	in feet	be.		suring po				
June 22,	1938	27.53	Jan.	4.	1940	30.60	Aug.	5.	1940	31.73
Dec. 14.		30.50				29.60				31.96
										-

80. Lewis Caldwell. In south half of lot 1, block 83, McCampbell subdivision, west part of Ingleside, 3.25 miles southwest of Aranas Pass. Used drilled domestic and stock well, diameter 4 inches, depth 90 feet. Measuring point, top of iron water pipe clamp set on concrete base, 0.6 foot above land surface, and 16.04 feet above mean sea level. Equipped with windmill.

	Water level,	in feet	below meas	uring po	int, 19	938-40	
June 22, 19	938 15.54	Jan.	4, 1940	17.10		6, 19 <b>4</b> 0	18.19
Dec. 14, 19	939 17.20	Mar.	15	17.42		<b>3</b>	18.12

85. W. H. Bryan. In center of lot 9, block 82, McCampbell subdivision, 3.25 miles west of Aransas Pass. Unused drilled domestic and stock well, diameter 4 inches, depth 35 feet. Measuring point, top of casing, 0.6 foot above land surface and 16.33 feet above mean sea level. Equipped with hand pump.

<u> </u>	ater level,	in feet b	elow meas	uring po	int, 1938	-40
June 26, 19 Dec. 12, 19		May 15		18.14 18.87	Nov. 16,	1940 19.88

86. T. H. Bennight. In west corner of lot 12, block 82, McCampbell, subdivision, 3.25 miles west of Aransas Pass. Used drilled domestic and stock well, diameter 4 inches, depth 52 feet. Measuring point, top of casing, 2.6 feet above land surface, and 14.46 feet above mean sea level.

W	ater level,	in feet l	pelow me	asuring po	oint,	1938-	-40	
June 24, 19 Dec. 14, 19		Mar. 18	5, 19 <b>4</b> 0	19.68 20.64			1940	19.80 19.84

107. L. S. Lane. Center lot 14, block 1, McCampbell subdivision, 2.5 miles northwest of Aransas Pass. Used drilled domestic well, diameter 4 inches, depth 22 feet. Measuring point, top of casing, 1.8 feet above land surface and 10.30 feet above mean sea level. Equipped with windmill.

	Water level,	in feet below	measuring	point, 193	8-40
Sept. 7, 1 Apr. 4, 1	1939 11.50	Dec. 12, 193 Mar. 18, 194		Aug. 6, Nov. 21	1940 13.24 12.21
May 2	11.32	.i		1	

# San Patricio County -- Continued.

119. R. E. Farley. Center of lot 16, block 5, McCampbell subdivision, 2.5 miles northwest of Aransas Pass. Used drilled domestic and stock well, diameter 6 inches, depth 60 feet. Measuring point, top of 4 by 4-inch wood water pipe clamp, 2.2 feet above land surface and 11.66 feet above mean sea level. Equipped with windmill.

Water level, in feet below measuring point, 1938-40

Date	Water level	Date	Water level	Date	Water level
Sept.12, 1938 Apr. 4, 1939 May 2	6.30 31.12 33.13	Dec. 14, 1939 Mar. 19, 1940	41.10 19.99	Aug. 6, 1940 Nov. 21	17.42 16.55

129. B. A. Linderman. Center of lot 7, block 353, McCampbell subdivision, 0.5 mile northwest of Aransas Pass. Umused drilled domestic and stock well, diameter 4 inches, depth 76 feet. Measuring point, top of 2 by 3-inch bushing, 1.6 feet above land surface and 15.01 feet above mean sea level.

	Water	level,	in feet	t below	measuring	point,	1938	, 1940	
Sept.12, Mar. 18.		15.00 15.31	Mar.		14.00	B Nov	. 20,	1940	14.15

140. Bruce Hannah. NW cor. lot 11, block E, Burton and Danforth subdivision, 3 miles southwest of Aransas Pass. Used drilled domestic and stock well, diameter 4 inches, depth 24 feet. Measuring point, base of pitcher pump, 0.1 foot above land surface and 15.10 feet above mean sea level. Equipped with hand pump.

	Water	level,	in feet	below	measuring	point,	1938	-40	
June 27, Dec. 12,			Mar.		40 21.58 22.08	B Dec	. 3,	19 <b>4</b> 0	21.85

144. Fred McMullen. In lot 16, block F, McCampbell subdivision, 3.25 miles southwest of Aransas Pass. Seldom used drilled domestic and stock well, diameter 4 inches, depth 35 feet. Measuring point, top of casing, 1.3 feet above land surface and 18.22 feet above mean sea level. Equipped with hand pump.

	Water	level,	in feet	below	measuring	point,	1938	-40	
June 26, Dec. 16,		20.66			40 22.1 22.3	4 Nov	. 20,	1940	23.42

## Shelby County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 11. Mrs. Ida Keeling. Seventy feet east, one block south of junction of U. S. Highway 84 and State Highway 35 in Timpson. Water levels, in feet below measuring point, 1940: Apr. 6, 10.34; July 13, 8.92; Nov. 27, 4.97.
- 26. Ed Bogard. Eight and one-fourth miles east of Tenaha. Water levels, in feet below measuring point, 1940: Apr. 6, 18.15; July 13, 17.33; Nov. 27, 18.3.
- 28. Phillip Whittaker. Eight and one-fourth miles east of Tenaha. Water levels, in feet below measuring point, 1940: Apr. 6, 16.94; July 13, 16.79; Nov. 27, 17.11.
- 35. J. W. Butler. In Tenaha. Water levels, in feet below measuring point, 1940: Apr. 6, 9.20; July 13, 9.62; Nov. 27, 6.36.

## Sherman County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

- 1. Measurements discontinued.
- 2. Measurements discontinued.
- 3. Seventeen and fifteen hundredths miles east of Stratford. Water level, in feet below measuring point, 1940: Aug. 8, 176.14.
- 4. Eighteen and sixty-five hundredths miles east of Stratford. Water levels, in feet below measuring point, 1940: Apr. 11, 190.81; Aug. 8, 190.76; Dec. 5, 190.94.

### Smith County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 68. Smith County. Twelve and thirty-five hundredths miles north of Tyler. Measured flow, in gallons per minute: Dec. 9, 1939, 0.32; Apr. 4, 1940, 0.41; July 11, 1940, 0.37.
- 69. Texas State Park Board. Tyler State Park, 9.25 miles north of Tyler. Unused well since July 1940. Water level, in feet below measuring point, 1940: Nov. 26, 120.49.
- 70-A. A. R. Krauss. South edge of Tyler State Park, 14.7 miles north of Tyler. Well dug deeper after Apr. 4, 1940. Water levels, in feet below measuring point, 1940: Apr. 4, well dry; July 11, 35.47; Nov. 26, 34.68.
- 86. J. T. Browning. One mile east of railroad station in Winona. Water levels, in feet below measuring point, 1940: Apr. 4, 23.29; July 12, 22.86; Nov. 26, 22.62.
- 93. L. A. Chapman. Three and fifteen hundredths miles southeast of railroad station at Winoma. Water levels, in feet below measuring point, 1940: Apr. 4, 16.44; July 12, 16.02; Nov. 26, 14.54.
- 102. Mrs. H. E. McVey. Twelve miles east of railroad station in Winoma. Water levels, in feet below measuring point, 1940: Apr. 4, 26.18; July 12, 25.25; Nov. 26, 25.31.
- 196. Lon W. Stanley. At Elkton siding, 4.4 miles south of Tyler. Water levels, in feet below measuring point, 1940: Apr. 3, 3.91; July 11, 5.15; Nov. 26, 4.56.
- 205. Sam Greenberg. One and forty-five hundredths miles east of court house in Tyler. Water levels, in feet below measuring point, 1940: Apr. 4, 19.08; Nov. 26, 13.15.
- 217. J. M. Holt. Six and fifty-five hundredths miles north of Tyler. Water levels, in feet below measuring point, 1940: Apr. 4, 54.95; July 11, 55.
- 343. Cotton Belt Railroad Company. Three-fourths mile north of railroad station in Bullard. Water levels, in feet below measuring point, 1940: Apr. 3, 3.68; July 11, 3.61; Nov. 26, 1.89.
- 353. J. L. Killough. In Bullard. Water levels, in feet below measuring point, 1940: Apr. 3, 15.36; July 11, 6.59; Nov. 26, 4.21.
- 462. J. B. Mayfield. Three and thirty-five hundredths miles southeast of center of Arp. Water levels, in feet below measuring point, 1940: Apr. 5, 100.69; July 12, 100.77; Nov. 26, measurements discontinued.
- 466. Martin Duckworth. One and nine-tenths miles southeast of center of Arp. Water levels, in feet below measuring point, 1940: Apr. 5, 30.57; July 12, 31.1; Nov. 26, 31.2.
  - 477. Measurements discontinued.
- 477-A. Emma Adams. Four hundred feet south of well 477. Water levels, in feet below measuring point, 1940: Apr. 5, 16.90; July 12, 13.89; Nov. 26, 5.50.

## Swisher County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 2. I. Irlbeck. Three miles south of Happy. Water levels, in feet below measuring point, 1940: Mar. 14, 78.39; Nov. 7, 78.58.
  - 3. Measurements discontinued.
- 3A. W. E. Williamson. One mile east of Happy. Water levels, in feet below measuring point, 1940: Mar. 14, 99.96; Nov. 7, 100.00.
  - 4. Measurements discontinued.
  - 5. Measurements discontinued.
- 13. B. F. Smith. Five and one-half miles south of Happy. Water levels, in feet below measuring point, 1940: Mar. 14, 75.20; Nov. 7, 74.84.
  - 14. Measurements discontinued.
- 16. C. M. Brant. Eight miles south of Happy. Water levels, in feet below measuring point, 1940: Mar. 14, 62.09; Nov. 7, 62.80.
- 18. H. C. George. Six and one-half miles south of Happy. Water levels, in feet below measuring point, 1940; Mar. 14, 77.46; Nov. 7, 77.65.
- 36. Poster Clouse, NW1SE1 sec. 2, blk. W1, 4.5 miles northwest of Tulia. Drilled irrigation well, diameter 24 inches, depth 250 feet.

  Measuring point, lower edge of end of 10-inch discharge pipe, 3.5 feet above land surface. Water level, in feet below measuring point: Apr. 20, 1934, 57.53; June 5, 1937, 59.30; Nov. 7, 1940, 60.43.
- 38. J. B. Johnson. Three miles northwest of Tulia. Water level, in feet below measuring point, 1940: Mar. 14, 56.32.
- 49. Northeast edge of Tulia. Water level, in feet below measuring point,  $1940\colon$  Mar. 14, 50.70.
- 50. One-half block north and  $\frac{1}{8}$  block east of Tulia High School. Water level, in feet below measuring point, 1940: Nov. 7, 62.31.
- 226. A. G.Cox. Seven miles east of Kress. Water level, in feet below measuring point, 1940: Mar. 5, 46.69; Measurements discontinued.
  - 245. Measurements discontinued.
- 254. Charles Inman. Eight miles east of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 39.44; July 9, 39.80; Nov. 15, 40.50.
- 255. Charles Inman. Seven and one-half miles east of Kress. Water level, in feet below measuring point, 1940: Nov. 15, 46.99.
  - 256. No measurements made in 1940.
- 258. A. G. Hinn. Eight miles east of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 53.75; Nov. 15, 55.07.
  - 261. No measurements made in 1940.
- 301. W. T. Adams. One mile southwest of Tulia. Water levels, in feet below measuring point, 1940: Mar. 14, 33.01; Nov. 7, 33.36.
- 302. J. D. Vaughn. One and one-half miles southwest of Tulia. Water level, in feet below measuring point, 1940: Mar. 14, 69.10; Nov. 7, 70.75.
  - 304. Measurements discontinued.
- 305. J. L. Cantrell. One and three-fourths miles southeast of Tulia. Water level, in feet below measuring point, 1940: Mar. 14, 38.06.
  - 315. No measurements made in 1940.
- 323. J. L. Guest. Six and one-half miles south of Tulia. Water level, in feet below measuring point, 1940: Mar. 5, 66.72.

#### Swisher County -- Continued.

- 332. W. F. Kerr. Four miles north of Kress. Water level, in feet below measuring point, 1940: Mar. 5, 64.35.
  - 339. Measurements discontinued.
- 352. John Elliott. Northeast of Santa Fe depot in Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 61.36; July 9, 61.67; Nov. 7, 62.18.
- 354. V. A. Beck. West edge of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 62.66; July 9, 62.78; Nov. 7, 63.00.
- 359. E. E. Formway. Two and three-fourths miles west of Kress. Water level, in feet below measuring point, 1940: Mar. 5, 77.34.
- 362. G. T. Hughes. Three and one-half miles southwest of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 71.32; July 9, 71.51; Nov. 7, 72.92.
  - 364. Measurements discontinued.
- 368. Texas Land and Development Company. Two and three-fourths miles south of Kress. Water levels, in feet below measuring point, 1940: Jan. 12, 76.25; Mar. 5, 76.10; Nov. 15, 78.17.
  - 369. No measurements made in 1940.
- 370. Texas Land and Development Company. Two and three-fourths miles south of Kress. Water levels, in feet below measuring point, 1940: Jan. 12, 74.19; Mar. 5, 74.11; Nov. 15, 75.24.
  - 371. No measurements made in 1940.
- 380. Joe Bontke. Five miles east of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 55.20; Nov. 15, 55.67.
- 383. Texas Land and Development Company. Four and one-half miles southeast of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 74.20; Nov. 15, 76.84.
- 385. Texas Land and Development Company. NW1NW1 sec. 53, blk. M14, 5.5 miles southeast from Kress. Umused drilled irrigation well, diameter 24 inches, depth 250 feet. Measuring point, lower edge of end of discharge pipe, 3.5 feet above land surface.

Water level, in feet below measuring point, 1936-40 Water Water Water Date Date Date level level level Aug. 12, 1938 Oct. 19 Feb. 28, 1939 Dec. 8, 1939 Mar. 5, 1940 Nov. 15 May 4, 1936 Sept.21, 1937 72.83 71.60 74.74 72.31 72.98 74.36 9, 1938 27 Apr. 71.87 72.74 77.63 June 72.95 Oct. 3 74.70

- 427. H. F. Reynolds. Six and one-half miles west of Kress. Water levels, in feet below measuring point, 1940; Mar. 5, 86.91; July 9, 87.08; Nov. 7, 87.10.
- 429. Reed. Five and one-half miles west of Kress. Water levels, in feet below measuring point, 1940: Mar. 5, 95.38; Nov. 7, 97.82.
  - 430. Measurements discontinued.

## Terry County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 2. J. P. Cox. SW cor. SW sec. 46, blk. DD, John H. Gibson survey, 4.35 miles southwest of Wellman. Water levels, in feet below measuring point, 1940; Jan. 16, 104.28; July 31, 104.12; Nov. 20, 104.12.
  - 5. Measurements discontinued.

### Terry County -- Continued.

7a. L. Hulse.  $NW_{4}^{1}SW_{4}^{1}$  sec. 143, blk. T, D. & W. R. R. Co., 0.7 mile east of Lahey Post Office and 0.8 mile south. Unused drilled domestic and stock well, diameter 6 inches, depth 107 feet. Measuring point, top concrete well curb around casing, 0.5 foot above land surface. Equipped with old wooden windmill tower.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Jan. 26, 1939 Aug. 12	97.31 97.20	Jan. 16, 1940 Sept.30	96.64 96.38	Nov. 20, 1940	96.35

- 8. Measurements discontinued.
- 9. Jenkins. NE cor. NE sec. 127, blk. T, 1 mile southwest of Brownfield. Water level, in feet below measuring point, 1940: July 31, 89.97.
  - 12. Measurements discontinued.
- 14. J. S. Smith.  $SW_2^1SW_2^1$  sec. 82, blk. 4X, 7.6 miles southwest of Meadow. Water level, in feet below measuring point, 1940: Nov. 20, 85.94.
  - 15. Measurements discontinued.
- 16. Challis Public School. SELSEL sec. 64, blk. 4X, 5.35 miles southwest of railroad depot at Meadow. Water levels, in feet below measuring point, 1940: July 31, 96.98; Nov. 20, 97.03.
- 17a.  $SE_4^1SW_2^1SW_2^1$  sec. 25, blk. 4X, 2 miles southwest of Meadow. Water level, in feet below measuring point, 1940: Nov. 20, 80.15.
  - 19. Measurements discontinued.

2la. NW\(\frac{1}{4}\)NW\(\frac{1}4\)NW\(\frac{1}4\)NW\(\frac{1}4\)NW\(\frac{1}4\)NW\(\frac

#### Travis County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

502. H. S. Lawson heirs. Six and one-half miles south of Austin. Equipped with automatic pump since May 24, 1940.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level level level Jan. 23 Apr. 29 16.73 18.45 11.46 July 26 10.24 Oct. 30 Feb. 26 14.25 13.99 Aug. 26 13.59 9.02 May 24 Nov. 30 Mar. 25 15.62 June 24 13.81 Sept.27 15.52

504. R. B. Gault. Ten and four-tenths miles south of Austin.

	Water	· level, in	feet be	low measuri	ng point,	1940	
Jan. 23	29.99	Apr. 29	24.03	July 26	23.15	0ct. 30	23.12
Feb. 26	29.89	May 24	23.15	Aug. 26	23.13	Nov. 30	23.06
Mar. 25	28.43	June 24	23.11	Sept.27	23.14	•	

199

#### Travis County -- Continued.

508. Barge Rence. Eight and three-tenths miles southwest of State Capitol Building in Austin. Measuring point to Feb. 29, 1940, base of plug at side of 2-inch tubing, 1.0 foot above land surface. Measuring point since Feb. 29, 1940, top of steel plate water pipe support, 0.7 foot above land surface.

	Water	level,	in feet be	low measur	ing point,	1940	
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30 Feb. 29 Mar. 27	232.40 232.48 232.31		6 232.53 8 232.48 8 232.47	June 25 July 29 Aug. 29	232.43 231.74 232.50	Sept.23 Oct. 28	232.56 232.60

 $509.\ Erlene$  Patton. Nine and four-tenths miles west of State Capitol Building, in Austin.

	Water	r level, in	feet be	low measuri	ng point,	1940	
Jan. 30	41.35	Мау 6	39.85	July 29	39.49	Oct. 28	39.54
Feb. 29	40.54	28		Aug. 29	42.48	Nov. 30	37.88
Mar. 27	40.69	June 25	41.13	Sept.23	40.89		

516. Frank Bailey. Three and eight-tenths miles southeast of First and Congress Streets, in Austin. Water levels, in feet below measuring point, 1940: Apr. 1, 34.88; July 9, 34.53; Nov. 21, 34.82.

519. Colorado Colored School Number 3. Nine miles southeast of Austin, 1.8 miles southeast of Delvalle. Water levels, in feet below measuring point, 1940: Apr. 1, 40.76; July 9, 40.34; Nov. 21, 40.73.

527. Sarah Moore. On U. S. Highway 290, 100 yards south of Cedar Valley post office.

	Water	· level, in	feet be	low measurin	g point,	1940	
Jan. 30	27.44	May 6	9.08	July 29	8.93	Oct. 28	14.21
Feb. 29	9.28	28	9.48	Aug. 29	9.37	Nov. 30	7.11
Mar. 27	9.48	June 25	8.33	Sept.23	10.94		

581. Measurements discontinued.

616. J. R. Moore. Fourteen and six-tenths miles west of State Capitol Building in Austin.

	Water	level, in	feet be	low measuri	ng point,	1940	
Jan. 30		Мау 6	148.70	July 29	145.12	Oct. 28	147.09
Feb. 29	144.52		148.21	Aug. 29	153.36	Dec. 6	138.70
Mar. 27	144.79	June 25	146.87	Sept.23	150.04		

618. Homer Heep. Fifty feet east of U. S. Highway 81, 1 mile north of Hays County line.

	 Water	level, in	feet be	low measuri	ng point,	1940	
Jan.		Apr. 29		July 26		0ct. 30	27.10
Feb. Mar.	23.35 25.12	May 24 June 24		Aug. 26 Sept.27	26.31	Nov. 30	19.09

621. Mrs. L. L. Hart. One-half mile east of Oak Hill. Water levels, in feet below measuring point, 1940: Jan. 30, 228.25; Feb. 29, 227.89.

640. Measurements discontinued.

#### Uvalde County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

H-2-4. J. H. Desmuke. Fifty yards north of white house, 0.5 mile west of Leakey-Uvalde road, 13.7 miles north of Uvalde County Court House.

Water level, in feet below measuring point, 1940

	Mater	10001, 111	1000 00	IOW MOASULI	ing borne	1940	
Jan. 16		Apr. 25					
Feb. 2	151.93	May 22	152.70	Aug. 22	149.00	Dec. 4	l 154.91
Mar. 20	152.74	June 19	151.14	Sept.26	150.49		

## Uvalde County -- Continued.

H-2-5. Mrs. W. E. Fitzgerald. Seventy-five feet north of house on hillside, 0.4 mile west of intersection of U. S. Highway 83 and State Highway 127, 17.8 miles north of Uvalde County Court House.

Water level, in feet below measuring point, 1940 Water Water Water Water Dete Date Date Date level level level level 57.31 Jan. 16 55.71 July 24 55.36 89.44 Apr. 25 Oct. 23 Feb. 24 56.90 May 22 54.65 Aug. 22 57.56 58.21 Dec. June 19 Mar. 20 56.78 55.10 Sept.26 66.61

H-2-8. W. O. Dubose. Thirty feet east of concrete tank, 75 yards southwest of house, 2 miles east of old U. S. Highway 83, 12.5 miles north of Uvalde County Court House.

Wate	r level, i	n feet be	low measur	ing point	1940		
Jan. 16 191.71 Feb. 24 193.83	Mar. 20 Apr. 25	195.07 196.62	May 22 June 19	195,80 198,10	Dec.	4	200.56

H-3-4. Measurements discontinued.

H-3-9. Measurements discontinued.

H-4-6. Briscoe, Fenley & Spangler. East side of north-south county road at jog in road, east edge of earthen reservoir, 4.5 miles west by northwest of Uvalde County Court House.

	Water	level, in	feet be	low measuri	ng point,	1940	
Jan. 15 Feb. 24 Mar. 18	67.65	Apr. 26 May 22 June 19	68.69 68.74 67.93	Aug. 22 Sept.26	68.70 70.00		71.02 72.29

H-4-8. Measurements discontinued.

H-4-18. Measurements discontinued.

H-4-28. J. R. Ingrum. One hundred and fifty yards north of west end of Nueces River bridge on U. S. Highway 90, 7.4 miles west of Uvalde County Court House.

	Water	· level, in	feet be	low measuri	ng point,	1940	
Jan. 15 Feb. 23		Apr. 24 May 21		July 24 Aug. 22		Oct. 23 Dec. 4	22.94 23.51
Mar. 20	21.36	June 18		Sept.25	22.37		

H-4-34. John Rosenow. On hilltop, 20 feet south of concrete tank at sheep pens, 3 miles north by winding road from white bump gate which is 12.4 miles west of Uvalde County Court House on U. S. Highway 90. Used drilled stock well, diameter 6 inches, depth 593 feet. Measuring point, top of iron water-pipe clamp, 0.5 foot above land surface. Equipped with windmill.

Water level, in feet below measuring point, 1939-40 Water Water Water Date Date Date level level level Mar. 22, 1939 162.70 161.08 Apr. 24, 1940 162.59 Aug. 22, 1940 Jan. 9, 1940 Feb. 24 May 21 Sept.25 163.63 157.50 162.44 159.98 June 18 158.94 165.60 Oct. 23 161.09 158.38 Mar. 19 July 23

H-4-35. John Rosenow. Fifteen feet north of concrete tank at sheep pens, 300 yards north of ranch house, 3.7 miles by road north by northwest of white bump gate, which is 12.4 miles west of Uvalde County Court House on U. S. Highway 90. Used drilled stock well, diameter 6 inches, depth 100 (?) feet. Measuring point, top of iron water-pipe clamp, 0.7 foot above surface. Equipped with windmill.

		Water	level,	in fe	et b	elow	measuring	point,	1939	9-40	
			63.30			1940		Sept		1940	68.30
Feb.	24,	1940	59.24	June	18			Oct.			67.60
Mar.	19		60.32	July	23		60.03	Dec.	4		70.39
Apr.	24		61.33	-							

201

## Uvalde County -- Continued.

H-5-1. City of Uvalde. Inside pump house of city water works, one-half block east and 2 blocks south of Uvalde County Court House. Water-stage recorder set, Oct. 24, 1940.

	Water	r level, in	feet be	low measuri	1940			
Date	Water level	Date	Water level Date		Water level	Date	Water level	
Jan. 12 Feb. 24 Apr. 23	24 32.97 July 24		33.94 33.78 34.26	Sept.25 Oct. 24	34.92 35.41	Oct. 25 Dec. 2	35.60 36.30	

H-5-22. Jack Dean. In garden, beside elevated tank, 100 feet south of old house, 0.1 mile east of U. S. Highway 83, 0.2 mile north of railroad tracks, 2 miles north of Uvalde County Court House.

Water	r level, in	feet bel	low measuri:	ng point,	1940	
Feb. 24 61.04	Apr. 23 May 22 June 19	62.28				64.02 64.94

H-5-26. Geo. Kennedy. In pasture, east side of large concrete tank, 0.1 mile east of U. S. Highway 83, 7.2 miles north by northeast of Uvalde County Court House.

	Water	level, in	feet be	low measuri	ng point,	1940	
Jan. 15	163.34	Apr. 25	164.99	July 24	164.52	Oct. 23	167.42
Feb. 24	163.89	May 22	165.34	Aug. 22	165.42	Dec. 4	168.57
Mar. 21	164.51	June 19	165.07	Sept.26	166.55		

H-5-39. Wm. Galloway. Twenty-five feet east of small yellow house at end of private road, 0.15 mile south of U. S. Highway 90, on hilltop, 2.5 miles east by northeast of Uvalde County Court House.

	Wate	r level, in	feet be	low measuri	ng point,	1940	 
Jan. 1 Feb. 2 Mar. 1	5 80.52	Apr. 26 May 20 June 19		Aug. 22 Sept.21	81.95 82.63		83.45 84.37

 $\mbox{H-}5\mbox{-}51\mbox{.}$  O. T. Caldwell. East side of U. S. Highway 83, behind concrete reservoir, 2.5 miles south by southwest of Uvalde County Court House.

	Water	· level, in	feet be	low measurin	ng point,	1940	
Jan. 15	40.55	Apr. 24	41.14	July 24	41.45	Oct. 23	42.50
Feb. 24	40.64	May 22	41.38	Aug. 22	41.79	Dec. 2	42.90
Mar. 18	40.83	June 19	41.53	Sept.25	42.15		

H-6-1. Ashby & Chinn. West side of concrete tank, 200 feet northeast of house on west side of concrete tank, north side of railroad tracks, 9.2 miles northeast by east of Uvalde County Court House, on U. S. Highway 90.

	Water	level, in	feet be	low measuri:	ng point,	1940	
Jan. 17	93.51	Apr. 26	95.33	Aug. 23	95.52	Oct. 21	96.08
Feb. 24	94.44	May 21	95.53	Sept.21	95.99	Dec. 2	96.34
Mar. 21	94.77	June 17	95.46	•			

H-6-8. K. K. Woodley. North side of elevated tank, 50 feet south of U. S. Highway 90 and east of local road, 1.5 miles east of Knippa.

		Water	level, i	n feet be	low measuri	ng point,	1940	
Jan.	17	73.37	Mar. 21	72.96	July 22	73.07	Sept.21	73.24
Feb.	21	72.97	Apr. 23	73.34	Aug. 22	73.23	Oct. 21	73.02
-	25	73.02	May 20	72.97	23	73.18	Dec. 2	74.64
Mar.	20	73.02	June 17	72.98				

#### Uvalde County -- Continued.

H-6-10. Herbert Stevens. Southeast of small house, 100 feet south of U. S. Highway 90, 2.9 miles west of Sabinal.

Weter level in feet below messuming noint 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16 Feb. 25 Mar. 21	68.53 68.59 68.87	Apr. 23 May 20 June 17	68.88 68.94 68.93	July 22 Aug. 23 Sept.24	68.92 69.18 69.29	Oct. 21 Dec. 2	69.62 68.87

H-6-16. Illinois Pipe Line Co. On top of hill among old cement foundations of former pipe line pump station and field camp, 300 yards west of bump gate located at telephone line crossing of north-south road, this point being 3.5 miles south on road with several turns that connects with U.S. Highway 90 at a point 1.5 miles east by north of Knippa.

	 Water	r level, in	feet be	low measur	ing point,	1940		
Jan. Feb.		Apr. 23 May 20		July 22 Aug. 22				177.11 178.64
Mar.				Sept.24	176.02	2001	_	

- XU-6. No measurements made in 1940.
- XU-7. Measurements discontinued.
- XU-8. Measurements discontinued.

XU-9. Frank Kirchgraber. East side of pentagonal cement tank, 25 feet southeast of elevated cypress tank, 50 feet north of white cattle guard on U. S. Highway 90, 16.5 miles west of Uvalde County Court House.

	Water	level, in	feet be	low measuri	ng point,	1940	
Jan. 15	56.49	Apr. 24	56.01	July 23		Oct. 23	57.46
Feb. 23	56.36	May 21	56.64	Aug. 22	56.11	Dec. 4	56.93
Mar. 20	56.28	June 18	55.67	Sept.25	57.31		

XU-10. Texas & New Orleans Railroad Co. Fifty feet east of railroad station at Cline, 200 feet north of U. S. Highway 90, 18.4 miles west of Uvalde County Court House.

	 Water	· level, in	feet be.	low measuri	ng point,	1940		
Jan. Feb.		Apr. 24 May 21		July 23 Sept.25	40.31 41.25			42.43 41.80
Mar.		June 19	40.52	Dept.20	4T.EO	Dec.	-1	41.00

# Val Verde County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

XV-1. B. S. Harrison. Forty feet south of white house and 30 feet east of second white house at end of private road, 0.6 mile south by southeast of bump gate located on U. S. Highway 90, 7.5 miles east of highway junction in Del Rio.

		Water	level, in	feet be	low measuri	ng point,	1940		
Feb.	23	39.15	May 21	39.04	Aug. 22	39.12	Oct.	22	39.63
Mar.	19	39.05	June 18		Sept.19	39.28	Dec.	3	39.47
Apr.	24	38.71	July 23	38.64					

XV-2. Otto Koog. West well of two wells, northwest side of large cement tank, 200 feet east of house, on west side of north-south road, 0.1 mile north of U. S. Highway 90 at a point 2.8 miles east of highway junction in Del Rio.

		water			ow measuri	<u> </u>	1940	
Jan.	15	75.92	Mar. 19	76.44	June 18	73.99	Oct. 22	76.47
Feb.	22	76.75	Apr. 24	75.85	Aug. 21 Sept.19	73.30	Dec. 3	74.70
	23	75.48	May 21	75.83	Sept.19	74.78		

#### Val Verde County -- Continued.

XV-3. Patricio Confreras. Seventy-five feet north of small house and 20 feet south of second small house, 150 feet north of U. S. Highway 90, 1.5 miles east of highway junction in Del Rio.

Water level, in feet below measuring point, 1940 Water Water Water Water Date Date Date Date level level. level level 15 38.96 Mar. 38.58 38,66 Jan. 19 39.44 June 19 Sept.19 22 39.25 Apr. 25 38,28 Oct. 22 39.15 Feb. July 23 40.31 May 23 39.25 21 38.71 21 38.28 Dec. 3 39.70 Aug.

#### Waller County

Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.

117. Mrs. H. L. Milam. Near railroad station at Prairie View.

Water level. in feet below measuring point 20 17.67 May 27 10 (a) Feb. June June 26 (a) (a) 7 29 15.59 May (a) (a) 11 18.04 July 7 (a) 9 30 (a) 12 16.03 16 15.40 13 (a) (a) (a) 16.55 (a) June 1 13 19 Aug. 14 15 3 a) 16.96 Oct. 21 6 21 17.70 Nov. 28 12.33

128. H. and T. C. Railroad. At Prairie View station on Houston-Hempstead highway. Seldom used drilled domestic well, diameter 6 inches, depth about 100 feet. Measuring point, bottom edge of pump base, 0.75 foot above land surface.

level, in feet below measuring point, 1940 Water 13 1 11 44.39 44.45 Apr. 25 44.14 44.92 June 30 44.15 21 44.26 12 44.30 16 44.05 7 44.05 27 44.32 13 44.35 19 44.49 May Aug. 9 29 15 44.30 44.90 44.27 Oct. 44.58 Nov. 28 44.78 10 44.27 30 45.35 21 44.40 11 44.25 44.40 26 44.42 June 6

151. Measurements discontinued.

152. Myers. One and fifty-five hundredths miles east of Prairie View railroad station along old U. S. Highway 290.

level, in feet below measuring point Water 1940 Feb. 4.50 20 2.90 13 6.37 June June 21 3.30 1.18 2.78 2.11 Apr. 3 6.85 21 7.66 10 26 3.85 30 5.42 4.70 27 July 8.02 11 1 1.46 7 16 2.78 12 29 May 8.00 9 5.02 30 13 2.48 11.20 4.27 Oct. 10 5.20 June 1 3.80 15 2.69 Nov. 28 3.00 5.70 11 4.23

154. W. D. Weaver. Eighty feet south of old U. S. Highway 290, 0.6 mile west of railroad station in Waller.

Water level, in feet below measuring point, 1940 Water Water Water Date Date Date level level level Feb. Oct. 20 15.08 14.56 15.88 June 29 30 14,93 Aug. 19 14.95 Nov. 28 14.00 Apr.

a Dry.

## Waller County -- Continued.

223. T. B. Tucker. Six and three-fourths miles northwest of Katy. Used drilled irrigation well, diameter 16 inches, depth 767 feet, screens set at 117 to 145, 165 to 198, 304 to 343, 425 to 445, 467 to 488, 596 to 630 and 693 to 714 feet. Measuring point, top of air line hole in pump base, 1.0 foot above land surface. Equipped with turbine pump.

Water level, in feet below measuring point, 1931, 1933, 1939-40

Date	Water level	Date	Water level	Date .	Water level
Feb. 10, 1931	49.17	Mar. 15, 1939	55.01	Mar. 12, 1940	57.06
Apr. 28	48.53	Sept.15	62.36	Apr. 27	56.84
Mar. 17, 1933	50.76	Dec. 21	58.11	Oct. 7	63.58

235. John Cope. Two miles west of Katy. Used drilled irrigation well, diameter 24 inches, depth 545 feet, screens set at 106 to 142, 182 to 219 and 454 to 511 feet. Measuring point to Mar. 15, 1939, 0.5 foot above land surface. Measuring point, since Mar. 15, 1939, lower edge of inverted and bent discharge pipe, 2.9 feet above land surface. Equipped with turbine pump.

Wat	er level	, in fee	t below measuring	point,	1931,	1933,	1939-40
Mar. 12,	1931	49.05	Mar. 15, 1939	57.92	Dec.	21, 193	39 <b>63.</b> 35
Mar. 18	1933	51.31	Sept.18	62.25	Mar.	12, 19	40 61.40

247. T. B. Tucker. Six and one-half miles northwest of Katy. Used drilled irrigation well, diameter 18 inches, depth 641 feet. Measuring point, top of air line hole in pump base, 1.0 foot above land surface. Equipped with turbine pump. Water levels, in feet below measuring point; Mar. 15, 1939, 56.57; Sept. 15, 1939, 67.00; Dec. 21, 1939, 59.90; Mar. 12, 1940, 58.59.

### Wharton County

- Well numbers correspond to those in Water-Supply Papers 840, 845 and 886.
- 4. Commercial State Bank. Under derrick beside transformer, 75 feet northwest of house, 1.4 miles west of Sandy Creek, 9 miles southwest of Hahn. Water levels, in feet below measuring point, 1940: Mar. 7, 37.99; Dec. 9, 36.20.
- 8. J. W. Wyer. At end of transmission line, 1,000 feet south of road, 0.7 mile west of Round Mott School, 6 miles southwest of Hahn. Water levels, in feet below measuring point, 1940: Mar. 3, 36.96; Dec. 9, 37.76.
- 31. Tom Thomas. Six hundred feet south of house, 6.5 miles north of Louise. Water levels, in feet below measuring point, 1940; Mar. 7, 27.40; Dec. 9, 28.23.
- 32. Harfst Bros. In old shed, undermeath derrick, near high-line transformer, 0.7 mile north of Cobbler Creek School, 4.5 miles southeast of Hahn. Water levels, in feet below measuring point, 1940: Mar. 7, 31.57; Dec. 9. 31.87.
- 35. Harfst Bros. In pump house near small red shed, 600 feet west of house, on south side of road, 1.75 miles east of Hahn. Water levels, in feet below measuring point, 1940: Mar. 7, 39.17; Dec. 9, 39.90.
- 70-A. J. J. Vacek. Ten feet south of small building, 0.1 mile south of U. S. Highway 90, 3.2 miles west of East Bernard. Water levels, in feet below measuring point, 1940: Mar. 11, 15.09; Dec. 11, 9.42.
- 70-B. J. Vacek. Two hundred and seventy-five feet south of well 70-A. Water levels, in feet below measuring point, 1940: Mar. 11, 14.19; Dec. 11, 10.81.
- 96. Frank Bucek. Thirty feet south of white house, 100 feet east of State Highway 60, 8.2 miles north of Wharton. Water levels, in feet below measuring point, 1940: Mar. 11, 24.69; Dec. 11, 24.14.

#### Wharton County -- Continued.

- 108. City of Wharton. On State Highway 60, south side of street, one-half block east and one block north of Wharton County Court House. Water levels, in feet below measuring point, 1940: Mar. 11, 25.01; Apr. 12, 24.65; Dec. 11, 24.77.
- 109. City of Wharton. Northeast corner of city water works lot in Wharton. Water levels, in feet below measuring point, 1940: May 9, 28.95; June 7, 28.88; Dec. 11, 30.01.
- 140. P. Dornak. In well house, 6 feet north from northwest corner of concrete swimming pool, 460 feet southwest of "T" road intersection of gravel road, and State Highway 71, 1.8 miles south from El Campo. Water level, in feet below measuring point, 1940: Mar. 11, 22.27.
- 165. H. P. Stockton. Thirty feet west of road, 600 feet north of two-story white house, 1.4 miles northwest of Louise. Water levels, in feet below measuring point, 1940: Mar. 7, 24.26; Dec. 9, 24.97.
- 173. Stoval & Appling. Under old derrick, between high-line and irrigation ditch, 100 feet northeast of road, 8.35 miles south of Louise. Water levels, in feet below measuring point, 1940: Mar. 11, 17.93; Dec. 9, 20.19.
- 178. Adrian Johnson. In wooden shed, 15 feet west of earthen tank, 386 feet east from house, 50 feet south of county road, 8.2 miles southwest from El Campo. Water levels, in feet below measuring point, 1940: Mar. 11, 18.36; Dec. 9, 18.49.
- 181. T. E. Appling. In galvanized pump shed, 200 feet southeast from red barn, 75 feet northwest from county road, 6.8 miles southeast from El Campo. Water levels, in feet below measuring point, 1940: Mar. 11, 24.38; Dec. 9, 25.65.
- 186. Otto Mickelson. In shed, east of red barn, 300 feet east of dirt road, 400 feet east of State Highway 71, 2.5 miles north of Danevang. Water levels, in feet below measuring point, 1940: Mar. 11, 18.31; Dec. 11, 18.26.
- 209. J. C. Allen. At end of galvanized pump shed, 200 feet southeast from red barn, 75 feet northwest of county road, 6.8 miles southeast from El Campo. Water levels, in feet below measuring point, 1940: Mar. 11, 15.64; Dec. 10, 1722.
- 239. Gulf, Colorado & Santa Fe Railway Company. At large black water tank, east of section houses and east of railroad track, 3.2 miles south of Boling Station. Water levels, in feet below measuring point, 1940: Mar. 11, 25.13; Dec. 11, 23.02.
- 241. Texas Gulf Sulphur Company. In wood pump shed, 75 feet north-west of private road, 400 feet northeast of time-keeper's office, in company grounds at New Gulf. Water levels, in feet below measuring point, 1940: Mar. 11, 36.79; Dec. 11, 27.59.

#### Zavala County

- Well numbers correspond to those in Water-Supply Papers 777, 840, 845 and 886.
- H7-13. Roy Cornett. Five miles north of La Pryor. Water levels, in feet below measuring point: Aug. 21, 1939, 130,93; July 31, 1940, 131.56.
- H7-20. W. R. Terpening. Five and one-half miles north of La Pryor. Water level, in feet below measuring point, 1940: July 31, 76.68.
  - M3-28. Measurements discontinued.
  - M3-29. No measurements made in 1940.
- M6-9. King Ware. Eight and one-half miles northwest of Cometa. Water levels, in feet below measuring point: Aug. 14, 1939, 52.62; Aug. 2, 1940, 52.65.

## Zavala County -- Continued.

- M6-10. W. M. Van Cleve. Seven and one-half miles northwest of Cometa. Water level, in feet below measuring point, 1940: Aug. 2, 74.67.
- M6-16. Jf S. Steward. Six miles northwest of Cometa. Water levels, in feet below measuring point: Aug. 14, 1939, 42.00; Aug. 2, 1940, 42.66.
- M6-18. N. E. Ware. Four miles northwest of Cometa. Water levels, in feet below measuring point: Aug. 14, 1939, 42.09; Aug. 2, 1940, 38.76.
- M6-19. L. D. Van Cleve. Three miles northwest of Cometa. Water levels, in feet below measuring point: Aug. 14, 1939, 55.73; Aug. 2, 1940, 56.50.
- M9-1. T. B. Mear. Cometa. Water levels, in feet below measuring point: Aug. 14, 1939, 71.61; Aug. 2, 1940, 63.78.
  - N1-17. No measurements made in 1940.
- N1-24. J. C. Williams. Two and one-half miles northwest of La Pryor. Water levels, in feet below measuring point: Aug. 21, 1939, 126.84; July 31, 1940, 123.29.
- N1-40. I. T. Pryor. Two miles west of La Pryor. Water levels, in feet below measuring point: July 21, 1939, 114.48; July 31, 1940, 105.05.
- M5-31. C. & M. Produce Company. Three miles northeast of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 51.83; Aug. 1, 1940, 38.02.
- N5-39. C. R. Jarrett. Two miles northeast of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 60.61; Aug. 1, 1940, 41.87.
- N5-40. C. R. Jarrett. Two and one-half miles east of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 55.92; Aug. 1, 1940, 39.70.
- N5-47. A. Wagner. Six miles east of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 86.32; no measurements made in 1940.
- N5-55. Cribbs & Davidson. Two and one-half miles east of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 59.02; Aug. 1, 1940, 43.55.
- N5-60. E. L. Reedy. Four miles east of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 58.29; Dec. 12, 1939, 67.00; Aug. 1, 1940, 49.67.
- N7-2. Murray. One mile southeast of Cometa. Water levels, in feet below measuring point: Aug. 13, 1939, 40.79; no measurements made in 1940.
- N8-7. W. W. Walker. Three miles southeast of Crystal City. Water levels, in feet below measuring point: Aug. 16, 1939, 55,78; no measurements made in 1940.

# ELM CREEK AND DEER CREEK AREAS OF SOIL CONSERVATION SERVICE

Water levels, in feet above arbitrary datum, in wells in Elm Greek and Deer Creek areas, near Temple, Texas, 1940

		V V W-							
Date		7	8	9	11	12	20	22	24
Jan.	4	11.02	11.62	(a)	2.35	4.70	9,64	8.72	10.44
	11	11.02	11.52	(a)	2.15	4.60	9.54	8.82	10.40
	18	11.02	11.52	(a)	2.25	4.60	9.44	8.62	10.40
	25	10.92	11.22	(a)	1.95	4.50	9.24	8.32	10.30
Feb.	1	11.02	11.22	(a)	1.95	4.20	9.14	8.32	10.30
	12	11.22	11.32	(a)	2.85	4.10	9.34	8.52	10.30
	15	11.22	11.42	( a )	2.95	4.10	9.44	8.62	10.40
	23	11.02	11.32	(a)	3.65	3.90	9.49	8.62	10.60
	29	11.22	11.32	(a)	3.75	3.80	9.44	8.62	10.90
Mar.	7	11.02	11.32	(a)	3.95	3.60	9.44	8.32	10.90
	14	11.02	11.32	(a)	3.95	3.50	9.24	8.22	10.90
	21	11.12	11.32	(a)	3.75	3.10	9.34	8.22	11.00
	28	11.22	11.32	(a)		3.00	9.34	8.12	11.00

Water levels, in feet above arbitrary datum, in wells in Elm Greek and Deer Creek areas, near Temple, Texas, 1940

Date	25	26	27	29	31	32	Average
Jan. 4	9.89	11.15	9.30	9.41	8.60	(a)	8,90
11	9.79	11.35	(a)	9.51	9.20	(a)	8.90
18	9.79	11.15	(a)	9.51	8.50	(a)	8.80
25	9.79	11.15	(a)	9.51	8.60	(a)	10.08
Feb. 1	9.79	11.15	(a)	9.51	8.80	(a)	8.69
12	9.79	11.15	9.70	9.81	10.20	(a)	9.03
15	9.79	11.05	9.70	9.91	9.80	(a)	9.87
23	9.79	10.95	9.70	10.01	9.90	(a)	9.08
29	9.69	11.05	9.60	10.11	9.60	(a)	9.09
Mar. 7	9.69	11.05	9.30	10.01	8.80	(a)	8.95
14	9.59	10.95	9.30	10.01	8.20	(a)	8,85
21	9.59	10.85	(a)	10.01	7.80	(a)	8.74
28	9.59	10.85	(a)	10.11	7.40	(a)	8.68

Noon stage of water level in well 13, in feet above arbitrary datum, obtained from water-stage recorder charts, 1940

Date		Water level	Date	Water level	Date	Water level	Date	Water level
Jan.	1	7.29	Jan. 25	7.16	Feb. 17	7.49	Mar. 11	8.41
	2	7.28	26	7.15	18	7.66	12	8.37
	3	7.27	27	7.14	19	7.81	13	8.32
	4	7.27	28	7.13	20	7.94	14	8.29
	4 5 6 7	7.27	29	7.13	21	8.05	15	8.25
	6	7.27	30	7.12	22	8.13	16	8.21
	7	7.26	31	7.12	23	8.21	17	8.17
	8 9	7.25	Feb. 1	7.12	24	8.29	18	8.14
	9	7.25	2 3	7.12	25	8.35	19	8.12
	10	7.24	3	7.11	26	8.40	20	8.07
	11	7.24		7.10	27	8.45	21	8.05
	12	7.24	4 5 6 7	7.10	28	8.50	22	8.02
	13	7.23	l 6	7.12	29	8.52	23	7.98
	14	7.22	7	7.13	Mar. 1	8.55	24	7.94
	15	7.22	8 9	7.14	2	8.56	25	7.90
	16	7.21		7.15	3	8.56	26	7.87
	17	7.20	10	7.16	4	8.57	27	7.83
	18	7.20	11	7.21	4 5 6	8.57	28	7.82
	19	7.19	12	7.27	6	8.56	29	7.80
	20	7.19	13	7.31	7	8.56	30	7.77
	21	7.18	14	7.34	8	8.53	31	7.75
	22	7.17	15	7.35	9	8.49	Apr. 1	7.73
	23	7.17	16	7.37	10	8.45	2	7.71
	24	7.16						

a Dry.